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ABSTRACT

This annex supplements the Puerto Rico Experimental Model Dental Training Program Comprehensive Report (CE 028 213) and is comprised of exhibits G through L. Among the information included in the exhibits is the evaluation reports of the commission on accreditation, the detailed curriculum, and the accredited program's scope, sequence, and course outlines. The detailed curriculum outline provides a weekly display of the program's objectives content, and sequence for year 1 and year 2 of the curriculum. For each year of the curriculum, the outline breaks the content into trimesters and, further, into periods. For each period, the outline provides brief content and list of objectives. (LRA)

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ED198403

PUERTO RICO EXPERIMENTAL MODEL DENTAL AUXILIARY TRAINING PROGRAM

The Comprehensive Report

Exhibits G to L

CE 028 275

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Exhibit G

COMMENTS AND SUGGESTIONS OF ADVISORY GROUP
(01 Curriculum)

COURSE	COMMENTS AND SUGGESTIONS
Dental Anatomy	1. Include application of morphology.
	2. Include root anatomy to support radiography.
	3. Evaluation strategy should include the ability to differentiate between specific teeth, between maxillary and mandibular and right and left.
Radiology	1. Specify landmarks of the maxilla and mandible that student will use in radiology.
	2. Have students take full series of X-rays on patients rather than just on manikins.
	3. Correct terminology of lab. requirements to read, "Given one full series of X-rays incorrectly taken, identify the errors in each and specify how each can be improved."
	4. Students be required to complete a minimum of six diagnostically acceptable series of radiographs, two on a manikin and four on a patient as lab. requirements.
	5. Students utilize radiographic evaluation sheet to evaluate each other X-rays and their own.
	6. Include experience of exposing radiographs on live patients as well as one set on a manikin.
Chairside Assisting	1. Lab. role play of oral evacuation techniques.
	2. Add use of fulcrum, mirror and explorer place after positioning and before saliva control.
	3. Add tray set up for oral examination under topic and lab.
	4. Utilize evaluation criteria and standards for traditional chairside assisting currently being developed by innovator systems.
	5. Add Angle's classification of normal occlusion.
	6. Utilize current tracking strategies in restoration procedures to give students application of procedures instrumentation and materials.

Dental Materials

1. Make Chairside Assisting and Dental Materials one course. Combine both courses, restructure to take topics and functions to completion.
2. Add cavity liners, bases and varnishes with cement.
3. Content in alginate impression taking be included for Track A students.
4. Develop evaluation vehicle to observe students manipulative skill. This may help to identify students with potential for expanded functions.

Preventive Dentistry II

1. Provide Track A students with opportunity to teach tooth brushing and floss.
2. Provide Track A students the opportunity to apply the preventive dentistry techniques taught during Preventive Dentistry II lectures.
3. Expand to elaborate on the microbiology concepts of caries, plaque and related preventive procedures.
4. Add tertiary prevention to operational objective 2.
5. Greater emphasis to potential of fluoride on primary prevention.
6. Include a clinical application of patient plaque control process.

Oral Embryology and Histology

1. Add at least minimum content in Histology.

Head and Neck Anatomy

1. Add, trace the main routes of blood supply in the head and neck.
2. Specify how the routes of blood supply relate to the lymphatic system and the transmission of disease in the body.
3. 70% mastery is too low. In competency based systems at least 80% should be expected. Current research indicates that 90% is also within reason.
4. Education for the traditional dental assistant should include content in whole body anatomy, head and neck anatomy and oral histology and embryology.

Psychology of Human Behavior

1. Needs to be more oriented to communication skills if that is objective.
2. Needs more underlying theory e.g., why communication problems arise, why certain communication methods are recommended.
3. Course title be changed to "Interpersonal Relations".
4. Need assessment of students' communication skills on continuing basis - including the clinic, rather than knowledge demonstration on test.

Clinical Rotation I and II

1. Need separate course outlines for Clinical Rotation I and II.
2. Combine Oral Radiology Clinical course outline with Clinical Rotation course outlines.
3. Need seminars weekly to discuss problems and share experiences.
4. Specific hour allocations for assisting in each of the specialty areas should be identified.

Dental Office Management

1. Content needs to be more structured to include lecture and practice in appointment planning, telephone techniques, record keeping, banking procedures, and inventory supplies. Further, identification of a text for this course would provide greater structure for both the student and instructor.
2. Principles of appointment planning, revise objectives 5 and 6, to indicate student can structure an appointment schedule to reduce operator and staff fatigue, minimum efficiency.
3. Adopt learning activities that provide basic information to all students.
4. Evaluate all students on knowledge and application of basic principles.
5. Revise objectives to reflect actual performance (simulation) of activities.
6. Structure class presentation to be augmented by observative experience.
7. Include such reference text as Erlich - The Dental Office Secretarial Assistant.

Expanded Functions in Preventive Dentistry	1. Omit Objective #1, enumerate the uses of the dental mirror and explorer - place in Chairside Assisting.
	2. Need to add objective that student is polishing only those patients for whom polishing is indicated (screening of patients) e.g., identify when polishing is contraindicated.
	3. For third trimester - Track B add the phrase "that patients have been screened by a D.D.S. or R.D.H. and determined to need a polish.
Expanded Functions in Restorative (2nd Trimester)	1. Establish criteria and standards of performance - follow format of Expanded Functions in Restorative-Clinical in third trimester.
Microbiology and Pathology	1. Weigh the final exam by assigning points to it.
	2. Delete considerations of epidemiology.
Seminars	1. Provide feedback weekly; develop objectives and activities.
	2. Seminar course could be added in second trimester for Level L Track A - Traditional Chairside Auxiliary - 6 months - for problem solving.
Human Biology	1. Add a course on Human Biology to curriculum of Level I

COMMENTS AND SUGGESTIONS OF ADVISORY GROUP

(02 Curriculum)

COURSE	COMMENTS AND SUGGESTIONS
Tasks for Level II Task A	1. Preamble statement indicating that all tasks are performed at the direct supervision of the dentist and/or under his supervision.
Task Intra/Extra Oral Exam	1. Assess occlusal status: Adults/children.
Task #14:Surgical Sutures	1. Delete remainder of sentence.
Task #3	1. Add "preliminary" to intra and extraoral exam.
Task #4	1. Add c. detect caries.
Task #5	1. Delete detect caries.
Task #6	1. Delete related to soft tissue curettage. 2. Ultrasonic task not included (may be assumed in selecting proper instruments).
Tasks	1. Add task of assessing occlusion in primary,mixed and permanent dentitions (to task 4 - intraoral hard tissue exam).
Course Schedules	1. Make use of summer between 01 and 02 year to teach: Adv. Preventive Dentistry) 33 hrs./wk. Pharm. and Pain Control) for 4 weeks (to free heavy load of 1st trimester) Plus offer some clinic time in 1st trimester or more basic sciences or sociology to summer. 2. Incorporate restorative clinical experiences throughout curriculum so students can maintain those skills. (10-15%) of total clinic time during year. 3. Provide additional clinic hours for practice of restorative procedures in second year. Be sure the time allotted for these procedures does not greatly affect clinical hours for periodontal skills.

Transferability of courses (can get from ASAP)

1. See if courses will be "transferable" into BS degree program in the University.
2. Obtain listing of institutions in the states which accept. Allied Health 2 years program in toto toward BS degree in Allied Health Studies, etc.

Dental Health Ed.

1. Alter objectives related to socioeconomic factors (p.4) by deleting references to lower SES groups... Goal should be to respect, appreciate and recognize values of individuals and how they relate to oral health without making judgements and without categorizing mass individuals.

Advanced Preventive Dentistry

1. Should include thorough head and neck examination and objectives related to it (eg; palpation of nodes, salivary glands) as well as laboratory time to practice the exam on a partner.
2. Eliminate obj. #18's reference to the hygienist as a myofunctional therapist. DH is assessing habits, not providing treatment (no evidence of value of myofunctional therapy).
3. Would like to see more time devoted to lab. practice on partners with scaling instruments. I'm not sure that students (even those previous experiences other instruments) can master use of scaling instruments without tissue trauma in such a short period of time now allocated.
4. In course outline be specific on time allocations. Two hours lecture/6 hrs. lab.practice. Designate exactly what is happening in each lecture and each lab.
5. May need to include review of root anatomy at beginning of course in order to be certain students remember from Dental Anatomy (which was given semester 1 of first year).
6. Further define operationally the objectives for the preliminary extra-intraoral examination.
7. Is there enough time to practice giving injections on each other or whatever, or do you feel it is necessary?
8. Add a lab. objective related to demonstration of instrumentation for scaling, root planning and curettage.

Pharmacology	1. More emphasis on application of pharmacology in rendering dental hygiene treatment how treatment will be altered by drugs, patients total; re problems associated with several drugs taken simultaneously.
	2. More practice administering anesthesia on partners-do not think that administering a type of injection first on a patient is wise (esp. psychologically for the student).
	3. Given a patient taking......a) identify drugs which are contra indicated: b)identify likely responses of the patient to dental care; c) and specify what drugs could safely be used in order to remedy particular oral conditions.
	4. Also please consider adding content regarding current dental (over the counter) products. (Perhaps as enrichment).
	5. Delete T19, E_4 since is a repeat of T5 E_3.
Special Needs Patients	1. OK to cut to one credit hour if time is needed for clinic or if the load appears too heavy. However, do not cut the whole course.
Biochemistry and Nutrition	1. Be sure you have nutritional counseling written back into the clinic I and II courses and then add it to the evaluation tools.
Dental Public Health	1. Need to reinforce content from D.H. education in area of program planning and evaluation and to provide applications of knowledge in "real world" setting e.g. why do I need to know this and how will this help me plan community programs? Also, content in research design, epidemiological method and statistics canbe applied in clinical courses (students can-- and should-- be utilizing this material in making judgement about "new" aspects of practice),
Clinic I	1. Recommend that students be given the opportunity to practice and maintain their clinical skills in restorative procedures during the first period of the semester and/or throughout the entire curriculum.

Clinic I or II	1. Build in pedo experience (polish, fl, patient management). 2. Include experiences in providing diet counseling for a specified number of patients (when appropriate) - making assessments about patients for when diet counseling is appropriate.
Extramural	1. Build it into Clinic I, II, III, rather than call it the "Extramural" program can save some potential semantic problems (i.e., conflict with wording in accreditation book).
Business Module	1. Recommend including content in third party payment plans and bookkeeping systems. 2. Provide cover page to Business Module which clearly explains the option of students to take this course.
Dental Anatomy or Chairside Assisting	1. Devise objectives to include recognition of "normal occlusions - Angle" and first molar rotation and eruption dates in charting or ortho, or oral exam).
Dental Anatomy I	1. Strongly recommend incorporating human (whole body) anatomy into this course - perhaps retitling course. It would be necessary to increase the total number of lecture hours in doing this.
Clinical Rotation I	1. Develop separate outline for 1A & 1B or note on present the specific assignments for 1A and 1B, and the total hours for each.
Oral Pathology II	1. May be difficult to present the abnormal processes of disease to student who have not yet covered the normal body processes (Anatomy and Physiology is offered year 02; oral pathology, year 01).
A.D.A. Accreditation Report	1. Copies of this report be provided to each member of the Advisory Committee prior to the next Advisory Committee meeting. Suggest doctor Pérez give doctor Coady authorization, in writing, to provide this report directly to each of us at time of distribution form A.D.A. Copies of the A.D.A. Site Visit Manual be provided to Advisory Committee members also.
Miscellaneous	1. Have next AdvisoryCommittee meeting immediately following receipt of the report on the accreditation site visit (January or February, 1979) of the Dental Assisting Program

EXHIBIT H

CONFIDENTIAL

EVALUATION REPORT

Commission on Accreditation of Dental and Dental Auxiliary Educational Programs American Dental Association

SUBMITTED TO:	Dr. Iris R. Perez, Director of Dental Auxiliaries
INSTITUTION:	University of Puerto Rico, School of Dentistry
CURRICULUM:	Dental Assisting, Dental Hygiene
DATE:	December 7, 1978

FORMAL REPORT OF THE COMMISSION ON ACCREDITATION OF DENTAL AND DENTAL AUXILIARY EDUCATIONAL PROGRAMS TO THE ADMINISTRATION OF THE UNIVERSITY OF PUERTO RICO ON THE DENTAL ASSISTING AND DENTAL HYGIENE PROGRAMS

San Juan, Puerto Rico*

INTRODUCTION

An evaluation of the dental assisting and dental hygiene programs offered by the University of Puerto Rico was conducted on October 2-4, 1978 by a committee of the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs composed of: Dr. James E. Vaught, Commission representative; Miss Lois Van Meter, consultant in dental assisting; Mrs. Darleen Perry, consultant in dental hygiene; and Misses Joyce Sigmon and Marsha Palmer, Commission staff members.

Commission objectives are based on the premise that dental auxiliary educational programs should continually strive to improve standards of scholarship and teaching consistent with the purposes and methods of higher education. Recommendations of the visiting committee are numbered and indented under appropriate headings of this report. Implementation of the recommendations can have significant influence in developing the dental auxiliary programs to meet their fullest potential. In addition to the recommendations which relate to accreditation standards, suggestions for program enhancement are offered.

The University of Puerto Rico's career ladder approach to dental auxiliary education necessitates a unique report format. When appropriate, the various sections of the report will be subdivided into a maximum of three areas: narrative and recommendations related to the institution's objective of preparing individuals for the field of dental assisting and expanded functions-Level One, Track B -- will be designated as Dental Assisting; narrative and recommendations related to the institution's objective of preparing individuals for the field of dental hygiene-Level One, Track B plus Level Two -- will be designated as Dental Hygiene; and narrative and recommendations common to both objectives. Unspecified narrative and recommendations should be assumed to relate to both objectives.

While the institution perceives its dental assisting and dental hygiene programs as phases of one program, the report will refer to each phase as a separate program to facilitate evaluation in terms of the Commission's separate standards for dental assisting and dental hygiene educational programs. The University of Puerto Rico's approach to dental auxiliary education consists of three separate curriculum phases. Phase one, or Level One, Track A, trains the students to become chairside dental assistants. This program lasts for two quarters or six months and provides basic material relevant to the subsequent programs. Because of its length and curricular content, the two quarter program is deficient in meeting dental assisting accreditation standards adopted by the Commission on Accreditation. Level One, Track B, a three-quarter program training the students in both chairside dental assisting and expanded functions, is the program being considered for dental assisting accreditation. This program has one trimester common with Level One, Track A and two trimesters specific to its own program, including the training in expanded functions. Level Two provides an additional year related specifically to training students for the field of dental hygiene. The second year builds on the curricular content presented in Level One, Track B. For this report, Level One, Track B, preparing individuals for the field of dental assisting, will be evaluated by the Requirements and Guidelines for Accredited Dental Assisting Education Programs. Level One, Track B plus Level Two, preparing students for the field of dental hygiene, will be evaluated by Requirements and Guidelines for Accredited Dental Hygiene Education Programs.

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* As approved for transmittal by the Commission on Accreditation, December 7, 1978.

The evaluation of and recommendations for the programs are based upon the current enrollment, present level of staff and caliber of students, all factors deemed critical to the success of this approach to dental auxiliary education. This accreditation site visit report is premised on maximum enrollment for each phase as follows:

Level One, Track A - forty students
Level One, Track B - twenty students
Level Two - eight students

ACCREDITATION HISTORY

Information on the accreditation classifications awarded previously to the dental auxiliary educational programs follows.

Date	Program	Action
July, 1962	Dental Assisting	Provisional Approval
May, 1963	Dental Assisting	Approval
May, 1969	Dental Assisting	Approval
December, 1970	Dental Hygiene	Accreditation denied
March, 1971	Dental Hygiene	Accreditation Eligible
May, 1972	Dental Hygiene	Conditional Approval
May, 1973	Dental Hygiene	Approval
May, 1977	Dental Assisting	Approval
May, 1977	Dental Hygine	Accreditation withdrawn

The site visit was scheduled as a result of major curriculum changes in developing this unified ladder approach to dental auxiliary education, entailing a regular evaluation of the operational dental assisting program and an accreditation eligibility for the new dental hygiene program for accreditation eligible status.

The first class of dental assisting students was enrolled in Level One of the program in August, 1977. The institution is authorized to grant graduates of the dental assisting program a certificate in dental assisting. Students were admitted to Level Two in July, 1978. The institution is authorized to grant graduates of the dental hygiene program an associate degree.

EDUCATIONAL SETTING

The University of Puerto Rico is a public institution which is accredited by the Middle States Association of Colleges and Secondary Schools. Following the regional accrediting agency's last evaluation in 1975, the University was granted full accreditation. The University of Puerto Rico is also accredited by the Puerto Rico Department of Education, having been granted full accreditation following an evaluation in 1957.

COMMUNITY RESOURCES

Professional Resources: The population of the city of San Juan which includes a broad range of population characteristics, such as age, socio-economic status, and oral health status, seems adequate to meet the professional and patient needs of the dental auxiliary program on a continuing basis. However, the visiting committee learned that there was competition within the dental school for patients needing certain services, such as restorative work, between the dental and dental auxiliary students. It is suggested that the administration and faculty promote constant recruitment of new patients to receive dental care through the dental auxiliary clinic.

Advisory Committee: The dental auxiliary program does not have a formal advisory committee; however, this function has been provided by the Dean of the School of Dentistry, the Assistant Dean of the School of Dentistry for Clinical Affairs, and by the Curriculum

Committee of the School of Dentistry. The Director of the Dental Auxiliary Department is also a member of this committee. While the visiting committee recognizes that input from these people is critical to the dental auxiliary program, there remains a need for a formal advisory committee to provide a liaison with the dental community and to serve as a resource in matters such as admission requirements, curriculum content and employment opportunities. In addition to such dental school personnel as administrators, faculty of the basic sciences, and clinical dentistry department faculty, the advisory committee should include dental assistants, dental hygienists and dentists who employ assistants and hygienists.

1. It is recommended that an advisory committee be appointed to provide liaison with the local dental and dental assisting/ hygiene community.

ADMINISTRATION

The ultimate authority for the dental auxiliary programs is vested in Puerto Rico's Council on Higher Education. It is composed of the Secretary of Educaton and eight other members who are appointed by the Governor. The line of authority then proceeds to the President of the University of Puerto Rico. Each of the four campuses of the University has a chancellor who serves as the administrative head of that campus. The College of Allied Health Professions, in which the dental auxiliary program is located, is one of five colleges on the Medical Center Campus. The Dean of the College of Allied Health Professions, who is responsible to the Chancellor of the Medical Science Campus, delegates the administrative authority for the dental auxiliary programs to the Director of the Department of Dental Auxiliary Programs who is a dentist. She in turn has delegated much of the administrative authority to another dentist, the Program Director of Dental Auxiliary Education. Under this program director, there are two clinical administrators: one for the dental assisting year of the curriculum, and one for the dental hygiene year of the curriculum. The administrative job descriptions that were presented to the visiting committee were primarily related to the EFDA project's development and not to program administration. The visiting committee found that several faculty members were not clear as to their administrative duties and some overlap exists in several of the positions.

2. It is recommended that the roles of individual faculty members involved in program administration be defined, their job descriptions be clarified and this information be communicated to those faculty members.

Although administratively the program is within the College of Allied Health Professions, the physical facility is located in the School of Dentistry. There appears to be good rapport and coordination of efforts between the administrations of these two separate colleges. The visiting committee wishes to commend the administration of the School of Dentistry and the College of Allied Health Professions on the communication, rapport and coordination which exists.

FINANCIAL OPERATION

The dental auxiliary program receives financial support from the state and federal governments. Budget requests for the auxiliary program are developed by the Director of the Department of Dental Auxiliary Programs and faculty for review by the Dean of the College of Allied Health Professions and the Chancellor of the Medical Sciences Campus.

For the school year 1978-79, the total budget was $308, 013. Of this, sixty-one percent was provided by federal grants and thirty-nine percent by state support. For the projected fiscal year 1979-80, the federal grant monies will be reduced to ten percent of the total budget and ninety percent of the budget is derived from state funds. The total budget for the next fiscal year is proposed to be $229,348. The visiting committee was concerned about the reduction for the school year of $78,665. In discussing this with the administration, it was learned that the majority of the reduced allocations are a result of the termination of the federal project in developing this program, including special educational evaluation specialists and other consultants needed to develop this curriculum. The concern about the increased state support needed for the next fiscal year was discussed with the Chancellor and other administrators and the visiting committee was satisfied that the administration expects the State to meet the needs of this particular program. The committee hopes that the current level of financial support will continue when the project terminates.

FACILITIES AND EQUIPMENT

The physical facility for the program for dental auxiliaries is located in the School of Dentistry. All of the classrooms, laboratories, and clinical facilities are located within this building. There are two classrooms each specifically for use by this program, a seating capacity of fifty-eight, in close proximity to the clinic and laboratory facilities for the dental auxiliary students. The classrooms are adequate and functionally designed for use of audio-visual materials. The dental laboratory has a total of sixty-six stations. The design of this laboratory is adequate in terms of safety, efficiency, and equipment.

Four separate radiographic operatories are designated for use by the dental auxiliary students, each with its own x-ray machine and dental chair. Two of these operatories are in the clinical sections of the dental school and the other two are in the laboratory section of the dental auxiliary department. Four practice manikins are available for radiographic laboratory exercises. Two darkrooms are available solely for the use of dental auxiliaries. A room in the clinical radiographic facility is used for mounting and viewing radiographs. The dental auxiliary students have full privilege to use this room shared with the dental students.

Nine faculty and staff offices are assigned to the auxiliary faculty. Within these nine offices, a total of 17 desks are available for faculty use. A conference room which is adjacent to these offices is used for a student counseling and staff meetings. Storage appeared to be adequate in the faculty offices for student records. Otherwise, storage throughout the program facilities is minimal or inadequate. Most of the instruments, materials and equipment are stored in the classroom and laboratory area. These areas were not very well organized as the space was insufficient for the amount of material being stored. The autoclave for sterilization is also located in the auxiliary laboratory area, a very congested part of the facility.

3. It is recommended that additional storage area for instruments and materials be provided and that these storage areas be organized so they are accessible to all faculty.

4. It is recommended that a sterilization area be established where all equipment is placed and where students can prepare instruments for sterilization in a more aseptic manner.

The dental auxiliary students share the main clinical facility with the dental students. Specific operatories are assigned to the dental auxiliary program.

Dental Assisting: The operatories are adequate in number, design and equipment for the dental assisting students' preclinical and clinical experience. The committee noted a shortage of some operative and specialty items for the number of students enrolled. It is suggested that the administration continue to budget monies to acquire additional operative and specialty instruments for use by the dental auxiliary students.

Dental Hygiene: The dental hygiene students are each assigned to their own operatory throughout Level Two clinical experiences. While some of the equipment in the clinic is newer, the dental hygiene equipment is outdated. The students cannot adequately place patients in the reclined position while scaling and the students must stand during polishing procedures because the belt-driven handpieces cannot reach the mouth while the patient is in the supine position.

5. It is recommended that equipment be modified to provide adequate patient positioning throughout all dental hygiene clinical procedures.

LEARNING RESOURCES

The Learning Resources Center is situated in the Medical Sciences Complex. In addition, the programs have access to the School of Dentistry's audiovisual center. Funding for the Learning Resource Center comes from the general fund and any faculty member may recommend titles for purchase. The collection of professional journals is complete and extensive. However, the collection of texts and references for the dental auxiliary students is quite limited; most of the references are over ten years old. The materials provided for faculty references, both scientific and educational, are also limited.

6. It is recommended that the collection of reference texts for student and faculty use be enlarged and updated.

The visiting committee is concerned that the use of library resources by the dental auxiliary students is minimal. Many of the references and textbooks have not been checked out for some time. The dental auxiliary students are assigned very few research projects involving the use of periodical literature.

7. It is recommended that faculty make reading and project assignments which will increase utilization of library resources by the dental auxiliary students.

All audiovisual equipment is centralized within the dental school. There is a very complete inventory of equipment for television production and videotaping as well as overhead, opaque and slide projectors. The instructional media seemed to be adequate for the dental auxiliary students.

FACULTY

At present, there are thirteen full-time faculty members. The institution's definition of a full-time faculty appointment is thirty-seven hours per week for a twelve-month period. Three dentists are employed full-time, including the Director of the Department and the Director of the Program; two additional dentists are employed part-time. One instructor is a dental hygienist, three are dental assistants and four are both dental assistants and dental hygienists. One instructor who was educated as a dental technician also teaches in the program. Currently an educational specialist serves full-time on the faculty. Her affiliation with the program will terminate this year as she has been functioning as a part of the federal grant project. No other changes in faculty load or positions are projected for the 1979-80 school year.

There appears to be adequate opportunity for in-service programs and faculty development. Several of the faculty members have continued their formal education while employed by the dental auxiliary program, a practice encouraged by the administration. Several of the faculty members are currently working on Baccalaureate and Masters degrees.

The visiting committee wishes to commend the faculty on their enthusiasm for the program and to commend the administration for the number of full-time faculty who are appointed on a twelve-month basis and the adequacy of the program's secretarial support.

Dental Assisting: The faculty:student ratio in the dental assisting phase of the program is 1:8 during laboratory, preclinical and clinical sessions.

Dental Hygiene: The faculty:student ratio during preclinical and clinical sessions is currently 1:3 or 1:2. The success of the concentrated instruction inherent in this program is dependent upon these low faculty:student ratios. Therefore, these low ratios must be maintained.

Currently the course in periodontology is being taught by a dentist who is a dental auxiliary faculty member. There has been no input from a periodontist either in developing the specific didactic course work or integrating this work with the dental hygiene students' experiences.

8. It is recommended that a periodontist have input into both the periodontology instruction and clinical experiences to encourage integration of periodontal principles and advanced instrumentation skills.

ADMISSIONS

The criteria required for admissions to Level One include: a high school diploma grade point average of 2.50 or above, results of College Entrance Examination Board, and geographical location. Only three parts of the College Entrance Examination Board are utilized: verbal, mathematics and English. Students submit their application through the University of Puerto Rico Centerl Admissions Office and send their credentials to the Central Office of Administrations at the Medical Sciences Campus. The program receives a computer list of all individuals who applied to the program.

The percentiles of both grade point average and College Entrance Examination Board are added and applicants are placed in rank according to their geographical location. A selection committee, including the Program Director, who is Chairman of the Admissions Committee of the College of Allied Health Professions, other dental auxiliary faculty members, and other members from the other programs within the College of Allied Health Professions, conducts selected interviews. The interview results are combined with the composite incoming grade point average and College Entrance Examination Board results to choose the forty individuals for Level One. This formula is in the process of revision because it did not discriminate as well as the faculty and administrators felt it should. The visiting committee wishes to commend the efforts of the administrators to study the correlation of admissions criteria with performance of their students.

Prerequisites for admission concerning chemistry and biology, and knowledge of English were unclear. While the committee was informed that all students are bilingual, some students who have been admitted only read and speak Spanish. There appeared to be the same inconsistencies among students concerning their science background.

9. It is recommended that the administration define basic admissions criteria more clearly, specifically related to chemistry, biology, and bilingual prerequisites.

The criteria used for choosing the twenty students to be admitted to Track B is a composite of the grade point average earned during the first semester, the student's rank in the core subject (chairside assisting/dental materials/dental procedures), the score obtained in the standardized English comprehension test, and the recommendation of the faculty.

Approximately fifty percent of those admitted to Track B are selected from students who have just completed Level One, approximately twenty-five percent from previous graduates of the University of Puerto Rico dental auxiliary programs, and twenty-five percent from other auxiliary programs. Currently enrolled in Track B are two hygienists and one dental assistant who did not complete the Level One, Track A component of this program.

Dental Hygiene: The criteria for admissions from Level One, Track B to Level Two and their assigned weight are: 1) academic performance (grade point average), forty percent; 2) faculty recommendation, forty percent; and 3) peer recommendation, twenty percent.

The admissions procedure for the Level Two, portion of the curriculum, allows for admission of outside candidates; however, the majority of the positions have been filled by students who have completed the Level One, Track B. Other candidates must: 1) be an expanded functions auxiliary with training in restorative and basic preventive procedures, course work, 3) have taken College Entrance Examination Boards and submit results, and 4) submit a letter from the employer or future employer stating the agreement to allow the auxiliary perform as an expanded functions dental auxiliary in periodontics.

One student was accepted this year who had not completed Level One, Track B. The faculty stated that this student needed considerable independent attention and remedial work. The visiting committee expressed concern about accepting students whose educational background is not equivalent to the other students entering the program. Because of the integrated nature of this curriculum, it becomes critical to evaluate both didactic and clinical skills of all students entering Level Two who did not complete the Level One, Track B portion of the dental assisting curriculum.

A comprehensive examination has been developed to test students at the nine-month exit point of the program. Using this examination as an entrance examination for Level Two students is planned. Currently, this examination contains materials relevant to restorative and preventive dental procedures as well as basic science and background information critical to dental assisting. The visiting committee expressed concern that the test might not evaluate theoretical and scientific principles or psychomotor skills necessary to this entry point of the dental hygiene curriculum.

people of the Commonwealth of Puerto Rico. The Dental Board of the Commonwealth recently restructured its Rules and Regulations pertinent to the functions which can be performed by dental auxiliaries. The Board has greatly expanded those functions delegated to the dental auxiliary and requires their regulation by the State.

Many areas of the island need increased dental care, though the population is scarce and locations are somewhat remote from the larger cities where dental care is readily available. Health planners for the island believe that having one auxiliary who is capable of performing a multitude of functions will make dental health care more accessible.

The University of Puerto Rico redesigned its dental assisting and dental hygiene programs accordingly. The goals of the new dental auxiliary program are to train dental auxiliaries to perform with accuracy and efficiency as a chairside dental auxiliary in a six-month track, as an expanded functions dental auxiliary in basic preventive and restorative dentistry in a nine-month track, and as an expanded funcitons dental assistant in advanced preventive dentistry and periodontics in an 18 month track. The first goal to prepare chairside dental auxiliary in a six-month track has many curricular deficiencies in relation to accreditation standards and does not meet the new program length requirement. Therefore, the visiting committee focused its attention on the nine-month track (Level One, Track B) and evaluated it according to the Requirements and Guidelines for Accredited Dental Assisting Education Programs. For dental hygiene, the total eighteen months of instruction, including all Level One, Track B and Level Two courses were considered in the curricular evaluation according to the Requirements and Guidelines for Accredited Dental Hygiene Education Programs.

The visiting committee was impressed by the overall level of development and organization of the curriculum materials and evaluation criteria. Detailed terminal objectives and extensive course outlines have been prepared for each course. The site evaluators expressed concern that most of the objectives indicated low levels of learning. After meeting with many of the faculty members, however, the committee concluded that much of the instruction is at higher levels than the specific course objectives indicate. Also, in many cases, essential content is presented to students that is not reflected in the course outlines.

12. It is recommended that the faculty revise course outlines and objectives to reflect the content which is actually presented and the higher levels of learning at which students are being tested.

The radiology course is assigned two hours of lecture and four hours of laboratory during the first trimester. This course includes the preventive aspect of radiation hygiene, anatomical landmarks for preliminary as well as exposure techniques. Laboratory exercises include two full mouth surveys completed on manikins. During the radiography clinical rotation, each student must complete full-mouth surveys of ten patients. The required surveys have not been divided into sub-groups of edentulous, pedodontic, mixed and adult dentitions because of the difficulty in procuring these different types of cases. Because there is no system of recording the types of patients, faculty and supervisors cannot channel patients to the students who are most in need of these specific types of experiences. The visiting committee also found that several full-mouth radiographic surveys had been exposed on patients within a very short period of time since prior surveys, in one case within three months. The faculty was uncertain about the dental school's policy concerning the repeated exposures.

13. It is recommended that a record keeping system be developed to aid in providing all students with diversified radiographic experience.

14. It is recommended that the dental school's policy be reviewed regarding the minimum interval between a patient's radiographic exposures and that this policy be followed in the dental auxiliary program.

Dental Assisting: The University of Puerto Rico dental assisting program has two purposes: 1) to prepare students for employment as chairside and expanded function dental assistants, and 2) to serve as the first phase of the dental hygiene curriculum. The dental assisting curriculum is scheduled during three trimesters, each twelve weeks in length. At the end of the three trimesters, the student is trained in chairside procedures and restorative and basic preventive expanded functions and qualifies for a certificate in dental assisting.

The first trimester includes instruction in microbiology, oral pathology, dental anatomy, radiology, psychology, preventive dentistry, human biology, chairside dental assisting, and dental materials.

The second trimester offers additional content in preventive dentistry, chairside dental assisting as well as ethics, jurisprudence and dental office management.

The third trimester includes course work in head and neck anatomy, oral embryology and histology, oral phathology II, clinical rotation II, clinical expanded functions in restorative, clinical expanded functions in preventive dentistry, and a seminar. All of the courses offered during Level One are taught by the dental auxiliary faculty, except psychology.

There is no course work in Level One in communications skills, content which should be included to prepare students to communicate effectively with patients. The visiting committee deliberated at length, whether in this bilingual community this instruction should be in English or Spanish. The committee concluded that the instruction should be in the English language since few texts and reference literature are written in the Spanish language.

> 15. It is recommended that the curriculum be revised to include required content in communications skills. This course should include both written and oral communication skills in the English language.

The dental assisting curriculum includes all subject areas required for an accredited dental assisting program except the communications skills previously mentioned. However, the content of many of the courses is not at the scope, level, and depth appropriate for a dental assisting program. There appears to be a lack of coordination of instructional effort; duplication occurs in several of the courses and specific objectives in courses being taught concurrently appear in a sequence contrary to general principles of learning. It should be noted that, in this aspect of the report's curriculum section, the committee's comments and recommendations for curricular changes focus solely on areas which are deficient in relation to accreditation standards for dental assisting programs.

A one-credit human biology course is offered in the first trimester; it lacks a laboratory component. There is no required text. In developing the course content, the nervous, endocrine, and lymphatic systems were omitted.

Microbiology/Oral Pathology I, a first trimester course which is a basic introductory course in both microbiology and oral pathology, emphasis is on microorganisms as they relate to sterilization procedures, disease transmission, oral lesions, and disease. The only instruction in septic technique is also presented in the first trimester in the chairside dental assisting course. The instructors of these two courses had it coordinated their efforts so that the microbiology portion would me prior to aseptic technique.

The only objective related to pharmacology was found in the aforementioned course. It is stated that the student will have knowledge in using the Physician's Desk Reference to identify drugs related to medical history including the following drug classifications: anti-imflammatory, anti-infection, analgesics, and sedatives. One hour is devoted to this portion of the course. The scope, level, and depth of instruction related to pharmacology are inadequate. No didactic material is included on general anesthetic or analgesics in any of the Level One courses. There is significant overlap of material in Microbiology/Oral Pathology I with the dental anatomy course which is taught concurrently. Some of this overlap results from sequencing problems. The instructor must present the normal oral anatomy before he can teach oral pathology.

Dental Office Management/Ethics and Jurisprudence course is currently being taught as a two-credit, two hour per week lecture course. In view of the depth and scope of the objectives for this course, the instructor desires to include laboratory exercises associated with insurance forms, records, filing systems and recall systems. The present time allocation is insufficient to add these exercises. The visiting committee concurs that laboratory time should be added to the dental office management course to aid in fulfilling the course objectives.

The Chairside Assisting/Dental Materials/Dental Procedures course presented in the first trimester meets for six lecture and eleven laboratory hours per week. This course consists of classroom and laboratory experiences which prepare the student to assist in general and specialty practices. It includes the study of dental materials, dental equipment and dental and medical emergency procedures. While this course offers background for many dental assisting tasks, a number of procedures are left to be learned on the job after graduation from the dental assisting program. Background for the laboratory procedures associated with removable and complete prosthodontics is lacking and there is no instruction in cleaning and polishing removable appliances and fabricating temporary restorations functions stipulated in the accreditation standards.

In this course, an oral surgeon presents a lecture on medical emergencies such as allergies and syncope. It is suggested that role playing be added to the emergency instruction. Students are urged to take a cardiopulmonary resuscitation course at a local hospital; however, this is not a required portion of the curriculum.

The clinical experience for dental assisting students consists of a total of 252 hours at the chairside, of which seventy-two hours are spent in dental specialty clinics. Much of this time, the students are providing assistance to dental students. About one-half of the restorative expanded functions clinical time is included in the 252 clinical hours. Each student is scheduled for two different sessions of the expanded functions restorative clinic course per week. During one period the student assists the dentist instructor during cavity preparation procedures; during the other session the student serves as the operator and places and finishes restorations.

The curriculum includes functions in both restorative and preventive aspects of dentistry. The student is required to reach a maximum level of proficiency in the laboratory before performing the function in the clinic. Expanded functions in preventive dentistry includes coronal polishing, the use of pit and fissure sealants, applying anticariogenic agents, and oral plaque control, and principles of nutritional analysis and sucrose control. Expanded functions in restorative dentistry includes the following procedures: 1) place and remove rubber dam, 2) place and remove temporary restorations and excess cement, 3) place and remove matrices and wedges, 4) place cavity varnish, 5) place, carve and finish Class I, II and V amalgam restorations 6) place and finish a composite resin restoration in Class III, IV and V cavity preparations; and 7) take an alginate impression. The two dentists who teach the restorative procedures are commended on the level of instruction and the evaluation instruments which they have devised for both the laboratory and clinical experiences.

16. It is recommended that content related to the nervous, endocrine, and lymphatic systems be added to the Human Biology course and that the time allotted for this course be increased to accommodate the additional content. Further, reference materials should be identified to supplement the instructor's lectures.

17. It is recommended that content be added to Level One, Track B concerning therapeutics utilized in the practice of dentistry. Information about general anesthesia should also be included.

18. It is recommended that either cardiopulmonary resuscitation instruction be included in the present dental and medical emergencies unit or all students be required to complete the course presently offered at the local hospital.

19. It is recommended that the content of the Chairside/Dental Materials course be increased to include background in the laboratory procedures associated with removable and complete prosthodontics, including both didactic and laboratory instruction in cleaning and polishing removable appliances and fabricating temporary restorations.

20. It is recommended that the amount of clinical practice experience be increased to approximately 300 hours.

Dental Hygiene: As mentioned previously, the University of Puerto Rico has developed a career ladder program with three exit points. After completing Level One, Track B which has been described previously, the students entering the hygiene phase of the program begin with a summer term of four weeks followed by three twelve-week trimesters. In evaluating the dental hygiene curriculum according to the Requirements and Guidelines for Accredited Dental Hygiene Education Programs, the committee reviewed pertinent instruction offered throughout the seventy-six weeks of formal education.

Because of the nature of this approach to dental auxiliary education, much of the information presented about offerings in Level One is not directly applicable to the evaluation of the dental hygiene program. Many of the courses in Level One which are taught on an introductory level are retaught in the Level Two, increasing the depth, level and scope for the Level Two student. Within these two years, there exists a significant amount of overlap between courses and inappropriate sequencing of subject matter. Curriculum coordination both within and between courses, is essential whether the courses are taught concurrently or sequentially. The visiting committee was pleased to learn during conferences that many of the instructors are teaching and testing at a higher level cognitive skills than the objectives presented in the course outlines indicate. The two recommendations included under the general curriculum heading (rewriting the course outlines and the course objectives to reflect content being taught and better coordination between courses) need to be reinforced throughout the two years of the dental hygiene curriculum. The visiting committee also noted that the majority of courses have no text books. Reference materials besides lecture outlines enhance the students' ability to comprehend the information presented. It is suggested that all faculty be encouraged to identify proper text books and reference materials as well as encourage research projects involving the Learning Resource Center for the dental hygiene students.

The summer session includes two courses: periodontics and advanced preventive dentistry, the preclinical instruction for five credit hours combining both laboratory and lecture material into a total of twenty-four instructional hours per week. The first trimester of the second year includes sociology, dental health education, anatomy and physiology, pharmacology, general inorganic and organic chemistry, and clinic I. The second trimester includes special needs patients, biochemistry and nutrition, dental public health and critique of dental literature, clinic II, and seminar III. The third trimester consists of two courses; clinic III and seminar IV.

At this time, a study is in process to determine college transferability of basic science and general education courses. All of these courses are designed specifically for the dental auxiliary program and most courses, with the exception of psychology, sociology, the chemistry and nutrition series, and dental public health are taught by the dental auxiliary faculty. None of the science courses include laboratory sessions. The number of credit hours that are transferable toward a baccalaureate degree, even at the University itself, has not been determined.

21. It is recommended that transferability of general education and basic science courses be determined to insure that they are being taught at an acceptable college level, and provide opportunity for students to work toward a Baccalaureate degree in the future.

In reviewing the general education requirements, the visiting committee noted that nowhere in the two year curriculum is there an English or speech course offered for the dental auxiliary student. Most of the textbooks and all of the current literature applicable to the dental hygiene students are printed in English. Communication skills in reading the literature and speaking to patients are a critical component of dental hygiene education.

22. It is recommended that college-level communications courses be incorporated into the curriculum including English and speech, which are transferable.

Students take a course entitled Psychology of Human Interaction totalling twenty-four hours of instruction in the first trimester of the first year. This course has been designed specifically for the dental auxiliary student and minimally teaches the basic principles of psychology. Knowledge of psychology allows a hygienist to solicit the patient's cooperation in the process of obtaining diagnostic data, to serve as health educator, and to assist in the management of medical and dental emergencies.

23. It is recommended that a college-level transferable general psychology course be offered in place of or in addition to Psychology of Human Interaction.

The visiting committee expressed concern about scope, level, and depth of several of the sciences, both in relation to other general sciences and to dental sciences. Concerns will be identified for specific courses. The visiting committee also expressed concern about the sequence of many of the science components of the curriculum. This will be addressed specifically as sequence recommendations following recommendations for specific courses.

Instruction in microbiology is provided in a twenty-four hour lecture course entitled Microbiology/Oral Pathology I, which is offered in the first trimester of the first year. The microbiology component is lacking in scope, depth and level. On the basis of the schedule of instruction included in the course outlines, the visiting committee estimates that approximately eight hours of instruction will be devoted to microbiology. Instruction is inadequate in scope in that it does not include material in the physiology of microorganisms required to support the hygienist's need to make decisions regarding the appropriateness of dental hygiene services and preventive measures necessary in providing dental hygiene services. The depth is inadequate in that the student is not expected to be able to determine the appropriateness of various types of sterilization procedures on the basis of characteristics of the microorganisms.

24. It is recommended that microbiology be taught in more depth and scope to reflect more adequately principles necessary to the practice of dental hygiene.

The anatomy and physiology course is taught as a three credit lecture course in the first trimester of the second year. Nowhere within this course or the Human Biology course of the first year is content presented on the nervous, endocrine and lymphatic systems. These systems become critical to the hygienist in the delivery of patient care. It is suggested that a laboratory experience be added to anatomy and physiology to enable the students to gain more depth in their understanding of these principles

25. It is recommended that anatomy and physiology be more inclusive in content to include the nervous, endocrine, and lymphatic systems.

Instruction in pathology is included in two courses which are presented during Level One, Microbiology/Pathology I and Oral Pathology II, a two-credit lecture course scheduled in the third trimester. The scope, depth and level of general pathology content are inadequate for the dental hygienist. The curriculum lack informatin on neoplasia and the oral manifestations of diabetes, leukemia and vitamin deficiency. The depth of the oral pathology course appears to be inappropriate in that insufficient emphasis is placed on the students' ability to differentiate pathology clinically or to relate pathology to clinical services provided by the dental hygienist.

26. It is recommended that the general pathology instruction be increased in scope to include neoplasia and oral manifestations of diabetes, leukemia, and vitamin deficiencies.

27. It is recommended that oral pathology instruction be increased in depth to relate pathology to clinical services of dental hygiene and differentiation of pathology clinically.

The pharmacology course is currently being taught as a two-credit lecture course in the first trimester of the second year. While this course appears to be adequate in depth and level, it is inadequate in scope because the interaction of local anesthesia is not included. The clinical dental hygienist has continual need for knowledge of the interactions of local anesthesia and this information, along with the nervous system, becomes critical in understanding the chairside procedures of dental care.

28. It is recommended that the scope of pharmacology be increased to include the interaction of local anesthetics.

The chemistry sequence starts with general inorganic and organic chemistry is the first trimester of the second year. The instructor for this course reflected that much of the information in inorganic chemistry was review for many of the students; however, she still spends more than half of the first course reviewing inorganic chemistry. The organic portion of the course begins halfway through the first trimester of the second year. The biochemistry and nutrition course taught in the second trimester is also a three-credit lecture course. The visiting committee was concerned about the level, depth and scope of instruction in combining these two subjects in three hours a week. In addition, the introduction of nutrition principles in the end of the second trimester of the second year does not allow the student much time to integrate these concepts into their clinical experiences as a dental hygienist. It is suggested that the administration require inorganic chemistry prior to admission to the dental auxiliary program, enabling the emphasis of the chemistry courses to be changed. Perhaps the first course, inorganic and organic chemistry, could be a review of inorganic and allow for more depth of instruction in organic chemistry and some biochemistry principles. The committee suggested that this course appear earlier in the curriculum, possibly in the summer of the Level Two so that nutrition could be offered in the first trimester. The content in biochemistry and nutrition course could then be more specifically related to dental hygiene and permit the depth and level of instruction to be increased.

Instruction in oral embryology and histology is provided in a twenty-four hour lecture course entitled Oral Embryology and Histology, a third trimester course Level One. The course instructor borrows audiovisual support materials from the dental school to teach this course. It is suggested that supportive audiovisual materials for teaching oral histology and embryology be procured and owned by the dental auxiliary department.

The twenty-four hour lecture course devoted to tooth morphology, entitled Dental Anatomy is offered in the first trimester of the first year. The scope of instruction is inadequate in that it does not include instruction on root morphology or root contours which is critical for the students' ability to remove the deposits from those portions of the tooth which are not visible. Information on the principles of occlusion also is lacking. The depth of instruction is inadequate in that it does not insure that students would have a working knowledge of instruction in this area. The level of instruction is inadequate in that it would not prepare students to recognize the broad range of normal tooth morphology.

29. It is recommended that the level, depth and scope of dental anatomy be increased to include principles of occlusion, root morphology, and tooth contours.

The radiography instruction is being taught in the first trimester of the first year, both in didactic and laboratory experiences. As previously mentioned, the need for more accurate records of the types of patients each student has experienced is necessary to encourage the maximum variety of clinical experiences for each patient. In the didactic portion of the course, the interpretation of radiographs for preliminary diagnosis is presented in the first trimester of the first year. This precedes instruction in head and neck anatomy, dental anatomy and oral pathology. Some means must be found to reinforce the radiographic interpretation after the critical science knowledge has been obtained.

The visiting committee found several problems in the sequencing of the courses in the curriculum. Currently community dental health is being taught in two different courses, Dental Health Education and Community Dental Health and Critique of Dental Literature. In the first trimester of the second year, Dental Health Education presents the principles of sociology, the learning process, and the basis for community dental health. In this course, students are required to complete two field experiences. Sociology is also taught in the first trimester of the second year, concurrent with dental health education. There seems to be a considerable overlap in content with sociology due to the fact that the two courses are being taught concurrently instead of sociology content preceding community dental health. Because of the concurrent scheduling of these courses the visiting committee was concerned that the student would not understand basic principles of sociology prior to evaluating specific community health problems.

30. It is recommended that the administration reevaluate the sequencing of sociology in relation to the principles of community dental health.

Community Dental Health and Critique of Dental Literature, offered in the second trimester of the second year, is an advanced course in public health statistics, epidemiology, and critique of the literature in the field. While the visiting committee encourages enhancement of the program, it suggests that the administration reviews content in dental health education and community dental health to eliminate content duplication.

In reviewing the sciences, the visiting committee expressed concern that much of the foundation science instruction is presented so late in the curriculum that the more complex science instruction is being taught concurrently, not sequentially. Content in the sciences must be sequenced so that the foundation in content is presented first; thereby, relationships using basic and more complex scientific knowledge can be established. Content that needs to be resequenced includes: anatomy and physiology in relation to head and neck anatomy, anatomy and physiology in relation to pathology, microbiology in relation to aseptic technique, organic chemistry in relation to nutritional counseling.

While students have a one-credit lecture course in human biology during the first year, the depth, level and scope of instruction does not provide sufficient background for head and neck anatomy and general pathology. Knowledge of physiology would be prerequisite to understanding the principles of pathology. Also knowledge of general anatomy is criticle to the understanding of oral pathology. The visiting committee suggests sequencing pathology so that it comes after normal anatomy and physiology.

Microbiology instruction occurs in the first trimester of the first year. Prior to the basics of microbiology, instruction in aseptic technique is presented in the first trimester in the chairside dental assisting course. The instructors of these two courses have not coordinated their efforts so that the microbiology portion precedes instruction related to aseptic technique.

Organic chemistry is taught in the first trimester of the second year. Concurrently, the student is studying pharmacology and anatomy and physiology which are interrelated with the organic chemistry content. The visiting committee was again concerned that the efforts of instructors were not being coordinated.

Biochemistry content is presented in the second trimester of the second year. Prior to this time the student is studying anatomy and physiology and pharmacology. These sequencing problems also need attention.

Students begin nutritional analysis in the first year without adequate exposure to biochemistry and the principles involved. It becomes critical for some chemistry knowledge prior to the point in the curriculum where the students have received information concerning dental materials and nutrition. This sequencing is unacceptable in the dental hygiene curriculum.

There is considerable overlap in content between oral pathology and dental anatomy. One of the objectives in Microbiology/Oral Pathology I is that "the student should be able to recognize the normal conditions of the oral structure which will help identify abnormal conditions. Included in this is size, shape, color, texture, and consistency of: lips, tongue, buccal mucosa, gingiva, floor of the mouth, and palate." Because of lack of coordination between courses, the instructor indicated that he must present this information before oral pathology content.

31. It is recommended that basic science content be resequenced to reflect:

    a. Anatomy and physiology before head and neck anatomy.

    b. Anatomy and physiology before pathology.

    c. Microbiology before asepsis.

    d. Organic chemistry before pharmacology.

    e. Biochemistry before any nutritional counseling.

Currently, the periodontics course is being offered in the summer between the first and second years, concurrent with preclinical dental hygiene instruction. The course is taught by a general dentist, a member of the dental auxiliary faculty. No conscious effort is being made to incorporate the principles of periodontics into the clinical courses. As recommended in the faculty section, a periodontist's input into the course is needed both in the didactic presentation of periodontics and the integration of advanced clinical skills in the clinic component. Nowhere in the curriculum is there an avenue for didactics pertaining to advanced clinical skills after preclinical instruction. Because of this, the visiting committee suggests that periodontics be sequenced one term later when the faculty are teaching more advanced skills in the clinic and the students can apply the principles of periodontics to their clinical experience.

The medical emergencies portion of the curriculum is taught in the first year and students are encouraged to take a course in cardiopulmonary resuscitation. As indicated in commentary about Level One, the visiting committee feels that this should be a required portion of the curriculum and the cardiopulmonary resuscitation instruction should be completed before clinical experience begins.

> 32. It is recommended that a course in cardiopulmonary resuscitation be required and completed prior to finishing the preclinical course work.

Preclinical instruction formally begins in the summer between the first and second year as a twenty-four hour a week concentration experience within a four-week period of time. While the visiting committee acknowledges that many skills, such as finger rests, use of the mirror, recording oral and medical histories, and polishing procedures have been taught prior to this time in the expanded functions portion of the curriculum, the critical instrumentation skills must be developed during this course. Preclinical instruction is being scheduled for seven and one-half hours each day for three days during each of the four weeks. The instructor estimated that about two hours were devoted to lectures and that the remaining time, approximately five and one-half hours, would involve laboratory experience. The visiting committee expressed concern that a schedule of this concentration might produce fatigue and would not enable the students to develop the necessary psychomotor skills prior to entering the clinical phase of their curriculum. Rescheduling the laboratory aspect of the preclinical course in smaller increments of time each day would enhance the students' psychomotor skill development.

The committee expressed concern about the lack of time for teaching the students the use of explorers for calculus and caries detection, clinical classification of patients, student evaluation forms, use of the periodontal probe and cavitron, clinical application or oral examination, curretage, and root planing. Every effort should be made to add additional laboratory experiences for these procedures prior to their clinical experience. The preclinical course includes much content which is not critical to instrumentation technique. For example, use of the phase microscope and classification of occlusion could appropriately be incorporated in other courses in the curriculum. By adjusting content in this manner, additional time could be made available for instrumentation techniques.

The faculty:student ratio in the preclinical course is one:two. Because of the concentrated manner in which this course is being taught, this faculty:student ratio is critical to the success of this phase of the curriculum. If student enrollment is increased, this factor must be recognized and assurances made to ensure that objectives can be met and that students receive sufficient individualized instruction at this critical point in the curriculum.

> 33. It is recommended that if the faculty/student ratio is increased, the time allotted for preclinical experiences and the sequence in the curriculum be critically reexamined to ensure that course objectives can be met.

The clinical phase of instruction begins in the first trimester of the second year with Clinic I. In this trimester students spend 3-1/2 hours, 4 afternoons a week for a total of 14 hours a week. In the second trimester students spend 6-1/2 hours two days of the week, 5-1/2 hours two days of the week, and 3-1/2 hours the other day. In the third trimester, students spend 6-1/2 hours every day in the clinic.

The visiting committee expressed concern about the effectiveness of long preclinical and clinical sessions. Six to seven hour sessions, extending from morning to afternoon, would inhibit the development of skills because of fatigue. Normally the clinical phase of the dental hygiene curriculum is taught in eighty weeks with at least sixty-four weeks, including practice with patients. At the University of Puerto Rico, the students receive their clinical training in thirty-six weeks. Consideration should be given to extending this portion of the curriculum wherever possible to support more effective clinical skill development.

The visiting committee expressed concern about the fact that the students' clinical time is reduced further because of the difficulties of patient procurement and the high rate of cancelled appointments. Also, one student serves as the clinical assistant during each clinic session; thus, each student functions as the assistant during one of seven clinic periods. This is a significant reduction in clinical time. In addition for 24 of the clinical hours per trimester students are scheduled in the restorative expanded functions clinic. Due to the ladder approach of this curriculum, the clinical experiences begin at a late entry point of the curriculum and actual experiences performing hygiene procedures for patients are critical.

The use of extended campus facility is providing additional patients for the students in the special needs and Veterans Administration hospital clinics. In using these extended campus facilities to meet these patient procurement needs, caution should be used in coordinating staff and evaluation format with the routine clinical experience.

The committee wishes to commend the faculty on the accurate records they maintain for each student concerning the number and types of patient experiences.

Clinical evaluation forms which have been developed for many procedures reflect both the process and the end product. However, instruments to evaluate instrument sharpness and cavitron usage have not been developed. Also, the criteria for patient classifications in regard to subgingival and supragingival calculus deposits were unclear to the visiting committee. The visiting committee commends the faculty for the work that has been done thus far and encourages them to continue refinement of the clinical evaluation mechanism.

While the clinical facility is sufficient for all hygiene students to achieve the required amount of clinical experience, the visiting committee was concerned about the impact which the equipment deficiencies have on the quality of this experience. The chairs being used are inadequate to support proper use of patient and operator positioning for polishing procedure and in the event of dental emergencies. The visiting committee also noted that there are no viewboxes in the clinic area. It is suggested that viewboxes be procured and students be encouraged to use radiographs throughout their dental hygiene clinical experience.

The visiting committee noted from the clinical course outlines that no formal lectures on advanced clinical skills are presented after the preclinical course. Seminars are scheduled the second and third trimesters, however no seminar is scheduled with Clinic I. The instructor responsible for the seminars does not participate in clinic sessions. It is important that continued integration between cognitive, psychomotor, and affective objectives be achieved throughout the clinical experience. Seminars should be used to achieve these objectives.

34. It is recommended that clinical courses be reevaluated in view of the late entry of clinical experience into the curriculum concerning these factors:

a. Patient procurement and broken appointment problems.

b. Reduced clinic time as a result of scheduled restorative expanded functions clinical assignments.

c. Reduced clinical time as a result of scheduled clinical assistants assignments.

35. It is recommended that the faculty continue refinement of their clinical evaluation forms to include instrument sharpness and cavitron usage, as well as clearer patient classifications in terms of supragingival and subgingival calculus deposits.

36. It is recommended that arrangements be made for students to practice adequate patient positioning throughout the clinical procedures.

37. It is recommended that a seminar be added in the first trimester of the second year and coordinated with Clinic I. Further, it is recommended that the Seminars III and IV ensure integration of advanced clinical skills and clinical experiences.

ACCREDITATION STATUS

At its December, 1978 meeting, the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs adopted a resolution to change the accreditation status of the University of Puerto Rico dental assisting program from "approval" to "conditional approval". In taking this action, the Commission also requested that a progress report be submitted for consideration during the December, 1979 meeting. It was the general feeling of the Commission that the dental assisting program should be reevaluated whenever the dental hygiene program is evaluated.

At its December, 1978 meeting, the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs also adopted a resolution to deny the accreditation status of "accreditation eligible" to the University of Puerto Rico dental hygiene program.

DETAILED CURRICULAR WEEKLY DISPLAY OF PROGRAM'S OBJECTIVES CONTENT & SEQUENCE

01 AND 02 YEAR CURRICULUM

Exhibit F

First Trimester 01 Year Curriculum

EK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD
1	19.5	Chairside Assisting/ Dental Materials/ Dental Procedures PROD 001	Goal Orientation, Course Overview Clinic Manual Dental Health Needs of the Nation Body Mechanics, Principles of Work Simplification Objective 1. APPLY THE CONCEPTS OF TIME AND MOTION TO THE CHAIRSIDE PROCEDURES OF FOUR-HANDED DENTISTRY. 2. APPLY PRINCIPLES OF BODY MECHANICS WHICH WILL REDUCE FATIGUE.	Introduction to Dental Equipment Operation and Maintenance of: 1. DENTAL UNIT 2. DENTAL UNIT LIGHT 3. DENTAL CHAIR AND STOOLS 4. OPERATORY SINKS 5. OPERATORY CABINETS Objectives 1. DISCUSS IN CLASS AND WORK IN THE CLINIC AREA THE CORRECT MANIPULATION OF BASIC DENTAL OFFICE EQUIPMENT AND INSTRUMENT. 2. DESCRIBE ON A WRITTEN EXAM THE PROPER MAINTENANCE OF BASIC DENT OFFICE EQUIPMENT AND INSTRUMENTS.	Dental Equipment, Rotary Instruments Operation and Maintenance of: 1. GEAR DRIVEN HANDPIECE 2. ULTRA SPEED AIR DRIVEN HANDPIECE 3. STANDARD CONTRA-ANGLE 4. PROPHY CONTRA-ANGLE Objectives 1. DISCUSS IN CLASS AND WORK IN THE CLINIC AREA THE CORRECT MANIPULATION OF BASIC DENTAL OFFICE EQUIPMENT AND INSTRUMENTS. 2. DESCRIBE ON A WRITTEN EXAM THE PROPER MAINTENANCE OF BASIC DENTAL OFFICE EQUIPMENT AND INSTRUMENTS.	Sterilization 1. Classification of Terms A. STERILIZATION B. DISINFECTION C. SANITIZATION D. CONTAMINATION 2. Methods A. MOIST HEAT B. DRY HEAT C. BOILING WATER D. CHEMICAL SOLUTION E. HOT OIL Objectives 1. RELATE THE CONCEPT OF PREVENTION TO THE RATIONALE FOR ASEPSIS. 2. DESCRIBE ON A WRITTEN EXAM THE DIFFERENCE BETWEEN THE TERMS STERILIZATION, DESINFECTION, AND SANITATION 3. IDENTIFY ON A WRITTEN EXAM A METHOD UTILIZED FOR STERILIZATION PURPOSE, FOR DESINFECTION PURPOSE, AND FOR SANITATION PURPOSE 4. DEMONSTRATE IN LABORATORY THE USE OF THE AUTOCLAVE AND DRICLAVE FOR STERILIZATION PURPOSE 5. DEMONSTRATE IN LAB. THE USE OF BEPHRINE CHLORIDE FOR DISINFECTIO PURPOSE AND ALCOHOL WIPES FOR SANITATION PURPOSES	Sterilization (Cont.) Same as Period IV

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	2	Dental Radiology	Course Description, Outline, and Requirements Origin and Behavior of X rays Physical Make-up of Matter Hazards of Radiation Primary and Secondary Radiation	4 hrs. lab. Introduction to X-ray equipment	
1	2	Macroscopic Dental Anatomy	Course Overview Goal Orientation Nomenclature Objectives 1. Discuss the general objective of the Dental Anatomy course. 2. Discuss the evaluation method. 3. Discuss the course outline and schedule of instruction. 4. Identify components of the oral cavity. 5. Identify and describe tooth structures. 6. Point out tooth surfaces and ridges of a maxillary first molar and a mandibular first molar.		

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
	2	Microbiology/ Oral Pathology I	Introduction to course; Basic concepts in the field of microbiology Objective Define these terms as they apply to microbiology: 1. Microbiology 2. Microorganisms 3. Pathogen 4. Pure culture 5. Germ theory of disease 6. Koch's postulates		
	1	Human Biology	Introduction, Course Objectives, The Living Cell, Connective and Epithelial Tissue. Objectives 1. Define Anatomy and Physiology 2. Describe the different parts of the living cell 3. Describe the process of mitosis 4. Discuss the difference between epithelial and connective tissue		
1	2	Psychology of Human Interaction	Brief History and Overview of the Science of the Study of Human Behavior Objective 1. Organize the elements that have contributed to the development of Psychology as the study of Human Behavior.		

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
2	19.5	Chairside Assisting/ Dental Materials/ Dental Procedures	Principles of operator, assistants and patient's position. Patient admission and dismissal. Objectives: 1. Demonstrate in a role playing situation in the clinic, how to greet, escort, seat, dismiss a dental patient. 2. Position patient, operator, and self for maximum efficiency. 3. Demonstrate ability to establish patient rapport in a role-playing situation in the clinic area.	Basic Instruments Saliva Control	Concepts of four handed dentistry. Objectives: 1. Utilize principles of four handed dentistry as a member of the dental health team.	Oral Exam Procedures Medical and Dental History Vital Signs Objectives: 1. Demonstrate ability to obtain a patient's medical and dental history utilizing the questionnaire method. 2. Take the blood pressure, pulse and respiration rate on a laboratory partner. 3. Enumerate the uses of explorer and mirror.	Introduction to Anesthesia Objectives: Given a set of procedure sheets, containing a list of instruments and material in order of use, the student will correctly set-up for administering anesthesia.
2	2 4 Lab.	Dental Radiology	X-Ray Equipment X-Ray Unit Components Regulating Devices X-Ray Production Collimation & Filtration Objectives: 1. Identify on a written exam the components of an x-ray tube. 2. Differentiate between "filtration and collimation". 3. Explain the term "total filtration".	(4 hours) Demonstration of Protective measures.			

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	2	MACROSCOPIC DENTAL ANATOMY	NOMENCLATURE OBJECTIVES: SAME AS WEEK ONE (1).		
2	2	MICROBIOLOGY /ORAL PATHOLOGY I	PHYSICAL CHARACTERISTICS AND CLASSIFICATION OF MICROORGANISMS. OBJECTIVES: DEFINE AND DESCRIBE THE FOLLOWING MICROORGANISMS AND THE DISEASES WHICH THEY PRODUCE 1. BACTERIA 2. RICKETTSION 3. VIRUS 4. FUNGI 5. SPORES 6. SPIROCKETES 7. PROTOZOA		
2	2	HUMAN BIOLOGY	INTEGUMENTARY SYSTEM, NOMENCLATURE IN GROSS ANATOMY. OBJECTIVES: 1. EXPLAIN THE PHYSIOLOGY OF THE INTEGUMENT.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	2	PSYCHOLOGY OF HUMAN INTERACTION	HOW THE INDIVIDUAL IS SHAPED. OBJECTIVES: EVALUATE THE RESPECTIVE CONTRIBUTION OF HEREDITARY, ENVIRONMENT, MATURATION AND THE CULTURAL HERITAGE IN THE FORMATION OF HER OWN PERSONALITY.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
3	10.5	CHAIRSIDE ASSISTING/ DENTAL MATERIALS/ DENTAL PROCEDURES	INTRODUCTION TO RESTORATIVE RUBBER DAM OBJECTIVES 1. RECOGNIZE HIS/HER ROLE IN EACH DENTAL PROCEDURE OR SPECIALTY 2. RECOGNIZE THE INSTRUMENTS USED FOR EACH DENTAL PROCEDURE 3. IDENTIFY THE DENTAL MATERIALS FOR SPECIFIC DENTAL PROCEDURE 4. SELECT THE PROPER CLAMPS TO BE USED IN PROCEDURES THAT REQUIRE THE USE OF RUBBER DAM	RUBBER DAM TRAY SET UP OBJECTIVE SAME AS PERIOD I	RUBBER DAM INSTRUMENT TRANSFER. OBJECTIVE *1. SAME AS OBJECTIVE OF PERIOD III OF WEEK #2. 2. GIVEN A SET OF PROCEDURE SHEETS CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE, THE STUDENT WILL CORRECTLY SET FOR RUBBER DAM PROCEDURE.	INTRODUCTION TO CUTTING INSTRUMENTS 1. SAME AS OBJECTIVE OF WEEK #3, PERIOD I 2. DEMONSTRATE ABILITY TO SHARPEN INSTRUMENTS FOR THE CONSERVATION AND PRESERVATION OF THE CUTTING EDGES.	CUTTING INSTRUMENTS (CONT.)
	2	DENTAL RADIOLOGY	RADIOGRAPHIC TECHNIQUE: BISECTING ANGLE PARALLELING TECHNIQUE T.1 OBJECTIVE PERIOD III PROTECT PATIENT AND SELF BY UTILIZING CORRECT POSITIONING OF FILM AND X RAY MACHINE WHEN TAKING DENTAL RADIOGRAPHS USING THE BISECTING OR PARALLELING TECHNIQUE. RADIATION: DENTAL FILMS: INTRA-ORAL - EXTRA-ORAL PROTECTIVE MEASURES T.1 OBJECTIVE FOR PERIOD IV PROTECT HER PATIENT AND HERSELF BY UTILIZING ALL SAFETY MEASURES AVAILABLE.	LAB. 4 HRS. TECHNIQUE DEMONSTRATION ON MANIKIN 4 HRS. DARKROOM DEMONSTRATION TECHNIQUE TECHNIQUE PRACTICE ON MANIKIN A. LONG CONE B. SHORT CONE INTERCHANGE GROUP			

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	2	MACROSCOPIC DENTAL ANATOMY	DEVELOPMENT OF THE TEETH OBJECTIVES: 1. DISCUSS THE DIFFERENT STAGES OF TOOTH DEVELOPMENT.		
	2	MICROBIOLOGY/ ORAL PATHOLOGY I	MODE OF TRANSMISSION OF MICROORGANISMS OBJECTIVES EXPLAIN THE FOLLOWING PROCESSES AS THEY RELATE TO DISEASE TRANSMISSION: 1. DROPLET INFECTION 2. INDIRECT TRANSMISSION 3. SELF-INFECTION METHOD 4. PERSONAL CONTACT METHOD 5. CARRIER		
	1	HUMAN BIOLOGY	REGIONS OF THE HUMAN BODY OBJECTIVES 1. DISCUSS THE GENERAL PLAN OF THE BODY STRUCTURE. 2. EXPLAIN THE ANATOMICAL TERMINOLOGY RELATED TO LOCATION AND POSITION OF THE BODY.		
	2	PSYCHOLOGY OF HUMAN INTERACTION	WHY PEOPLE BEHAVE AS THEY DO INDIVIDUAL DIFFERENCES AND NEEDS OBJECTIVE #3: IDENTIFY THE PRIMARY AND SECONDARY NEEDS OF THE ORGANISM AND HOW THEY INTERACT TO BRING ABOUT DIFFERENCES AMONG INDIVIDUALS.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
4	15.5	CHAIRSIDE ASSISTING/ DENTAL MATERIAL/ DENTAL PROCEDURES	INSTRUMENT TRANSFER OF HAND CUTTING INSTRUMENTS. OBJECTIVE: SAME AS OBJECTIVE OF PERIOD III OF WEEK TWO (2).	INTRODUCTION TO DENTAL CEMENTS, CAVITY LINERS, BASIS. OBJECTIVES: 1. IDENTIFY THE CORRECT CONSISTENCY AND TEXTURE OF THE MATERIALS FOR THE FOLLOWING PROCEDURES: CEMENTATION, TEMPORARY RESTORATION, AND THERMAL INSULATOR (BASE). 2. IDENTIFY THE PHYSICAL PROPERTIES OF THE MATERIALS TO BE USED IN THE INDIVIDUAL PROCEDURES.	DENTAL CEMENTS (CONT.)	DENTAL CEMENTS (CONT.)	INSTRUMENT TRANSFER ON DENTAL CEMENTS. OBJECTIVE: 1. SAME OBJECTIVE OF PERIOD II OF WEEK #2. 2. GIVEN A SET OF PROCEDURES SHEETS, CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE, THE STUDENT WILL CORRECTLY SET-UP FOR DENTAL CEMENTATION PROCEDURES.
4	2	MACROSCOPIC DENTAL ANATOMY	PERMANENT MAXILLARY AND MANDIBULAR ANTERIOR TEETH. OBJECTIVES: 1. IDENTIFY PERMANENT MAXILLARY AND MANDIBULAR ANTERIOR TEETH ACCORDING TO ITS ANATOMICAL CHARACTERISTIC. 2. COMPARE THE ROOT ANATOMY OF MAXILLARY AND MANDIBULAR ANTERIOR TEETH IN RELATION TO NUMBER OF ROOTS, FORM AND LENGTH. 3. DISCUSS THE RELATIONSHIP BETWEEN TOOTH MORPHOLOGY AND HOW IT AFFECTS SURROUNDING TISSUES WHICH SUPPORT THE TOOTH.				

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	2	Microbiology /Oral Pathology I	Methods by which microorganisms produce disease. Objectives: Define the following terms as they apply to the methods by which microorganisms produce disease: 1. Normal flora 2. Etiological agent 3. Virulence 4. Exotoxin 5. Endotoxin 6. Hemolysins 7. Leukocidins 8. Hyaluronidase 9. Hypersensitivity 10. Allergy		
4	1	Human Biology	The skeletal system. Objectives: Analyze the skeletal system.		
4	2	Psychology of Human Interaction	Why People Believe as they do: Ego Protection Objectives: #4 Distinguish between conscious and unconscious motivations as determinants of behavior.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
5	13.5	CHAIRSIDE ASSISTING/ DENTAL MATERIALS/ DENTAL PROCEDURES	INTRODUCTION TO DENTAL AMALGAM OBJECTIVES 1. RECOGNIZE HIS/HER ROLE IN EACH DENTAL PROCEDURE OR SPECIALTY. 2. IDENTIFY THE DENTAL MATERIAL FOR SPECIFIC DENTAL PROCEDURE. 3. IDENTIFY THE PHYSICAL PROPERTIES OF THE MATERIALS TO BE USED IN THE INDIVIDUAL PROCEDURE. 4. DESCRIBE THE BIOLOGICAL CONSIDERATION ASSOCIATED WITH THE DENTAL MATERIALS AND PROCEDURES DISCUSSED.	CLASS I AND II AMALGAM OBJECTIVES 1. RECOGNIZE THE INSTRUMENTS USED FOR EACH DENTAL PROCEDURE. 2. GIVEN A SET OF PROCEDURE SHEETS CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE, THE STUDENT WILL: CORRECTLY SET-UP FOR AMALGAM PROCEDURE.	MIXING AMALGAM OBJECTIVE 1. MANIPULATE CORRECTLY THE MATERIALS AND INSTRUMENTS FOR EACH PROCEDURE	INSTRUMENT TRANSFER IN AMALGAM OBJECTIVE 1. SAME AS OBJECTIVE OF PERIOD III OF WEEK #2. 2. RECOGNIZE THE INSTRUMENTS USED FOR EACH DENTAL PROCEDURE.	INTRODUCTION TO COMPOSITE RESIN SAME AS OBJECTIVES OF PERIOD I OF WEEK #5
	2	DENTAL RADIOLOGY	DARKROOM AND PROCESSING PROCEDURES, IDENTIFICATION OF INADEQUACIES IN RADIOGRAPHS T.1 PERIOD V DEMONSTRATE DARKROOM PROCEDURES, UTILIZING CARE IN THE PROCESSING OF DENTAL FILMS BY MAINTAINING CORRECT WATER TEMPERATURE AND DEVELOPING AND FIXING TIME.	LAB. 4 HRS. PRACTICE MOUNTING AND TECHNIQUES PRACTICE: A. LONG CONE B. SHORT CONE			
	2	MACROSCOPIC DENTAL ANATOMY	PERMANENT MAXILLARY AND MANDIBULAR PREMOLARS OBJECTIVES 1. IDENTIFY PERMANENT MAXILLARY AND MANDIBULAR PREMOLARS ACCORDING TO ITS ANATOMICAL CHARACTERISTIC. 2. COMPARE THEROOT ANATOMY OF MAXILLARY AND MANDIBULAR PREMOLARS IN RELATION TO NUMBER OF ROOTS, FORM, AND LENGTH.				

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	2	Macroscopic Dental Anatomy	3. Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.		
	2	Microbiology Oral Pathology I	Partial Examination and Discussion		
	1	Human Biology	The Musculatory System Objective 1. Explain the function of the muscular system. 2. Differentiate between smooth, striated and cardiac muscles.		
	2	Psychology of Human Interaction	Why people behave as they do Ego Protection Objective #5: Identify a defense mechanism presented in given situation.		

First Trimester 01 Year Curriculum

Week	Hours	Course	Period I	Period II	Period III	Period IV	Period V
6	12.5	Chairside Assisting/ Dental Materials/ Dental Procedures	Composite Resins (Cont.) Objectives: 1. Given a set of procedures sheets, containing a list of instruments and materials in the order of use correctly set-up for composite procedures.	Instrument Transfer on composite resins. Same as objective of Period IV of week 5.	Charting Procedures. Objectives: Demonstrate ability to correctly chart dental conditions as designated by the instructor.	Charting Procedures (Cont.) Same objectives Period III of week 6.	Introduction to Pedodontics Same objectives of Period I of week 5.
6	2	Dental Radiology	Radiographic Interpretation Normal Structures Abnormal Structures Anatomical Landmarks Mountings Full series, bite wings. T1 Objective for Period VI Recognize the Medium Palative suture, anterior palative foramen, nasal septum, nasal cavity, maxillary sinus, maxillary tuberosity, coronoid process, hamular process, mental foramen and mandibular canal. T2 Distinguish between radiopaque and radiolucent.	(4 hours) Practice Mounting and Technique Practice A. Long cone B. Short cone			
6	2	Macroscopic Dental Anatomy	Written Examination.				

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	2	Microbiology Oral Pathology I	Mechanisms of body defined. Objectives: Describe these terms as they relate to the mechanisms of body defense towards disease 1. Bacterindal 2. Bacteriostatic 3. Antigen 4. Antibody 5. Immunity 6. Toxin 7. Vaccine 8. Anaphylaxis 9. Phagocytosis 10. Bacteremia or septicemia 11. Focus of infection		
6	1	Human Biology	The Digestive System Objectives: 1. Describe the digestive system. 2. Discuss the process of digestion.		
6	2	Psychology Of Human Interaction	First Half Midterm Exam Second Half: Why We learn: Intellectual and Social Learning Objectives: Distinguish between intelectual, social and motor skills, learning and their relevance and implication for dental assisting.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
7	19.5	CHAIRSIDE ASSISTING/ DENTAL MATERIAL/ DENTAL PROCEDURES	PEDODONTIC (CONT.) RECOGNIZE THE INSTRUMENTS USED FOR EACH DENTAL PROCEDURE.	INSTRUMENT TRANSFER ON PEDODONTIC OBJECTIVES 1. SAME AS OBJECTIVE OF PERIOD III OF WEEK #2. 2. GIVEN A SET OF PROCEDURE SHEETS, CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE THE STUDENT WILL A. CORRECTLY SET-UP FOR PULPOTOMY PROCEDURES. B. CORRECTLY SET-UP FOR STAINLESS STEEL CROWN PROCEDURES.	INTRODUCTION TO CROWN AND BRIDGE PROCEDURES. SAME OBJECTIVES OF PERIOD I OF WEEK #5.	CROWN AND BRIDGE (CONT.) 1. RECOGNIZE THE INSTRUMENTS USED FOR EACH DENTAL PROCEDURE.	CROWN AND BRIDGE (CONT.) 1. MANIPULATE CORRECTLY THE MATERIALS AND INSTRUMENTS FOR EACH PROCEDURE.
7	2	DENTAL RADIOLOGY	OCCLUSAL SURVEY. INTRA-ORAL EXTRA-ORAL BITEWINGS LATERAL PLATES PANOREX APHALOMETRIC TI. OBJECTIVE FOR PERIOD VII BE FAMILIAR WITH ACCESSORY DENTAL RADIOGRAPHIC TECHNIQUES AND ITS USES.	(4 HOURS) TECHNIQUE, DEMONSTRATION AND PRACTICE ON MANIKIN AND PARTNER.			
7	2	MACROSCOPIC DENTAL ANATOMY	PERMANENT POSTERIOR MAXILLARY MOLARS: OBJECTIVES: 1. IDENTIFY PERMANENT MAXILLARY MOLARS ACCORDING TO ITS ANATOMICAL CHARACTERISTICS. 2. COMPARE THE ROOT ANATOMY OF MAXILLARY MOLARS IN RELATION TO NUMBER OF ROOTS, FORM AND LENGTH.				

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
			3. Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.		
7	2	Microbiology Oral Pathology I	Body response to irritation Objectives: Describe these terms as they relate to the basic responses of the human body to trauma or irritation. 1. Oral pathology 2. The basic responses of the human body to trauma or irritation: redness, swelling, pain, heat loss of function. 3. Repair: granulation tissue, dense connective tissue and scar tissues. 4. Etiologic factors or pathology.		
7	1	Human Biology	The Circulatory System Objective: 1. Describe the circulatory system.		
7	2	Psychology of Human Interaction	How We Learn: Learning of Motor Skills and their Relevance in Dental Assisting. Objectives: Illustrate the three phases of the learning of motor skills by making macrame.		

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
8	19.5	CHAIRSIDE ASSISTING/ DENTAL MATERIALS/ DENTAL PROCEDURES	INSTRUMENT TRANSFER ON CROWN AND BRIDGE OBJECTIVES 1. SAME OBJECTIVE OF PERIOD III OF WEEK #2 2. GIVEN A SET OF PROCEDURE SHEETS CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE, THE STUDENT WILL CORRECTLY SET-UP FOR CROWN AND BRIDGE PROCEDURES,	PROSTHODONTIC PROCEDURES OBJECTIVES SAME AS OBJECTIVES OF PERIOD I OF WEEK #5.	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVES 1. MANIPULATE CORRECTLY THE MATERIAL AND INSTRUMENTS ON EACH PROCEDURE. 2. GIVEN A SET OF PROCEDURE SHEETS CONTAINING A LIST OF INSTRUMENTS AND MATERIALS IN THE ORDER OF USE, THE STUDENT WILL CORRECTLY SET UP FOR PROSTHODONTIC PROCEDURE.	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVE 1. POUR AND TRIM STUDY CAST.	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVE 1. POUR AND TRIM STUDY CAST
8	2	DENTAL RADIOLOGY	FACTORS INFLUENCING FINISHED RADIOGRAPHS COLLIMATION AND FILTRATION PROCESSING OF RADIOGRAPHS REGULATING DEVICES T 1 OBJECTIVES BE ABLE TO RECOGNIZE AND INTERPRET THE FACTORS THAT INFLUENCE FINISHED RADIOGRAPHS.	4 HRS. DARKROOM PRACTICE TECHNIQUE PRACTICE ON MANIKIN			
3	2	MACROSCOPIC DENTAL ANATOMY	PERMANENT POSTERIOR MANDIBULAR MOLARS OBJECTIVES 1. IDENTIFY PERMANENT MANDIBULAR MOLARS ACCORDING TO ITS ANATOMICAL CHARACTERISTICS. 2. COMPARE THE ROOT ANATOMY OF A MAXILLARY AND MANDIBULAR POSTERIOR AND ANTERIOR TEETH IN RELATION TO NUMBER OF ROOTS, FORM, AND LENGTH. 3. DISCUSS THE RELATIONSHIP BETWEEN TOOTH MORPHOLOGY AND HOW IT AFFECTS SURROUNDING TISSUE WHICH SUPPORT THE TOOTH.				

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8	2	MACROSCOPIC DENTAL ANATOMY	4. RECOGNIZE THE RELATIONSHIP BETWEEN THE TOOTH FORM AND ITS FUNCTIONS.		
8	2	MICROBIOLOGY/ ORAL PATHOLOGY I	NORMAL CONDITIONS OF ORAL STRUCTURES OBJECTIVE RECOGNIZE THE NORMAL CONDITIONS OF ORAL STRUCTURES WHICH WILL HELP TO IDENTIFY THE ABNORMAL CONDITIONS. A. SIZE, SHAPE, COLOR, TEXTURE, AND CONSISTENCY OF 1. LIPS 2. TONGUE 3. BUCCAL MUCOSA 4. GINGIVA 5. FLOOR OF MOUTH 6. PALATE		
8	1	HUMAN BIOLOGY	THE EXCRETORY SYSTEM OBJECTIVE DESCRIBE THE STRUCTURES AND FUNCTIONS OF THE EXCRETORY SYSTEM.		
8	2	PSYCHOLOGY OF HUMAN INTERACTION	HOT WO COPE WITH CRISIS - ERICKSON THEORY OF PERSONALITY OBJECTIVE #8: CREATE A SITUATION, THROUGH ROLE PLAYING ON HOW TO COPE WITH DIFFERENT CRISIS IN A DENTAL OFFICE.		

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
9	19.5	CHAIRSIDE ASSISTING/ DENTAL MATERIALS/ DENTAL PROCEDURES	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVE 1. POUR AND TRIM STUDY CAST	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVE 1. FABRICATE CUSTOM TRAYS FOR IMPRESSIONS.	PROSTHODONTIC PROCEDURES (CONT.) OBJECTIVE 1. FABRICATE CUSTOM TRAYS FOR IMPRESSIONS.	MEDICAL AND DENTAL EMERGENCIES PROCEDURES OBJECTIVES 1. DEMONSTRATE KNOWLEDGE OF DENTAL AND MEDICAL EMERGENCY PROCEDURES THAT MOST COMMONLY OCCUR IN THE DENTAL OFFICE. 2. LOCATE AND OPERATE EMERGENCY EQUIPMENT.	INTRODUCTION TO ORAL SURGERY PROCEDURES OBJECTIVES SAME AS OBJECTIVES OF PERIOD I OF WEEK #5.
	2	DENTAL RADIOLOGY	DEALING WITH RADIOLOGY PATIENTS T 1 OBJECTIVE FOR PERIOD IX DEMONSTRATE ABILITY TO DEAL EFFECTIVELY WITH RADIOLOGY PATIENTS.	(4 HOURS) TECHNIQUE PRACTICE ON MANIKIN			
	2	MACROSCOPIC DENTAL ANATOMY	PRIMARY DENTITION, COMPARISON BETWEEN PRIMARY AND PERMANENT DENTITION OBJECTIVES 1. DESCRIBE THE DIFFERENCES AND SIMILARITIES BETWEEN PRIMARY AND PERMANENT DENTITION IN RELATION TO: GENERAL SHAPE, SIZE, NUMBER, AND COLOR. 2. DISCUSS THE CHARACTERISTICS OF PRIMARY DENTITION.				
	2	MICROBIOLOGY/ ORAL PATHOLOGY I	NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS RELATED TO ORAL INFECTIONS OBJECTIVE NAME THE MOST IMPORTANT MICROORGANISMS IN THE NORMAL FLORA OF THE MOUTH.				

FIRST TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	2	PSYCHOLOGY OF HUMAN INTERACTION	HOW TO COPE WITH CRISIS: ANXIETY CONFLICT, FRUSTRATION, ET. AL. OBJECTIVE #8 (SEE ABOVE)		

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	PERIOD V
10	19.5	Chairside Assisting/ Dental Materials/ Dental Procedures	Oral Surgery (Cont.) Objectives: 1. Recognize the instruments used for each dental procedure. 2. Given a set of procedures, sheets, containing a list of instruments and materials in the order of use the student will correctly set-up for surgical procedures.	Oral Surgery (Cont.) Same objectives as Period I, week 10.	Oral Surgery (Cont.) Same objectives as Period I, week 10.	Introduction to Periodontal Procedures Same objectives as Period I of week #5.	Periodontal Procedures (Cont.) Objectives: 1. Recognize the instruments used in each dental procedure. 2. Manipulate correctly the materials and instruments for each procedure.
10	4	Dental Radiology	No didactic.	Laboratory only: Technique Practice on manikin.			
10	2	Macroscopic Dental Anatomy	Same objectives as week 9.				
10	2	Microbiology Oral Pathology I	Diseases of the oral cavity. Developmental disturbances of the face. Objectives: 1. Describe and identify the most common lesions of oral cavity. 2. Recognize the most common types of developmental disturbances of the face.				
10	1	Human Biology	The Reproductive System. Objectives: 1. Explain the physiology of reproduction.				

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	2	Psychology of Human Interaction	The Individual and His Group. Objectives: Identify the different processes and elements that gives coherence in an occupational group.		

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
11	19.5	Chairside Assisting/ Dental Materials/ Dental Procedures	Instrument Transfer on Periodontal Procedures. Objectives: 1. Same as Period III, week #2. 2. Given a set of procedures, sheets, containing a list of instruments and materials in the order of use, the student will correctly set-up for periodontal procedures.	Endodontic Procedures. Same as objectives of Period I of week #5.	Endodontic Procedures (Cont.) Objectives: 1. Recognize the instrumental used in each procedure. 2. Manipulate correctly the material and instruments for each procedure.
11	4	Radiology	Final (didactic)	Technique: Practice on manikin	
11	2	Macroscopic Dental Anatomy	General discussion and review.		
11	2	Microbiology Oral Pathology I	Drugs related to medical history taking and use of P.D.R. Objectives: Knowledge in using the PDR as a reference to identify drugs related to medical history taking.		
11	1	Human Biology	Review.		
11	2	Psychology of Human Interaction	(Term Paper due) Performing Life Tasks Objectives: Develop a self profile as regards her assets and liabilities for the selected occupational goals.		

First Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12	19.5	Chairside Assisting/ Dental Materials/ Dental Procedures	Orthodontic Procedures (Cont.) Objective Recognize the instrument used in each procedure.		
	4	Dental Radiology	Final (Practical) Examination	Technique Practice on Manikin.	
	2	Macroscopic Dental Anatomy	Final Examination		
	2	Microbiology/ Oral Pathology I	Final Examination and Discussion		
	1	Human Biology	Final Examination		
	2	Psychology of Human Interaction	Final Examination Objective #11 - Apply the acquired knowledge in writing term papers of the following theme: "In some ways every man is like all other men; in some ways every man is like no other man".		

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	3	PREVENTIVE DENTISTRY II	T 1. DISCUSS THE PHILOSOPHY, RATIONALE, AND PRESENT DAY CONCEPTS OF PREVENTIVE DENTISTRY. A. DEFINITION B. REASONS C. PRIMARY, SECONDARY, TERTIARY PREVENTIVE MEASURES D. LEVELS OF PREVENTION	T 2. DISCUSS THE ECOLOGICAL CONCEPTS OF DENTAL CARIES. A. DEFINITION B. THEORIES OF CARIES FORMATION C. FUNCTION OF ACID, PLAQUE, BACTERIA, CARBOHYDRATES, DEXTRANS, AND LEVANS. D. CONTRIBUTORY FACTORS E. FACTORS AFFECTING RATE OF DESTRUCTION	T 2. DISCUSS THE ECOLOGICAL CONCEPTS OF DENTAL CARIES. A. TYPES OF DENTAL CARIES B. COMMON LOCATION OF CARIOUS LESSIONS C. DEFINITIONS OF RAMPANT, ACUTE, CHRONIC, RECURRENT, ARRESTED, AND INCIPIENT CARIES. D. MEASURES FOR CARIES CONTROL
	2	DENTAL OFFICE MANAGEMENT/ ETHICS/JURISPRUDENCE	COURSE OVERVIEW AND COURSE OBJECTIVES (GOAL ORIENTATION) ROLE OF THE DENTAL AUXILIARY IN PRIVATE PRACTICE OBJECTIVES: NONE		
	7	EXPANDED FUNCTIONS IN PREVENITVE DENTISTRY	LABORATORY POLICIES AND PROCEDURES COURSE OVERVIEW OBJECTIVES OF POLISHING EFFECTS OF POLISHING ON TOOTH STRUCTURE USE OF MIRROR AND EXPLORER PORTE POLISHER VS. ENGINE POLISHING T 1. OBJECTIVES FOR PERIOD I DISCUSS THE OBJECTIVES OF POLISHING CORONAL SURFACES AND ITS EFFECTS ON TOOTH STRUCTURE. T 2. COMPARE ENGINE POLISHING AND PORTE POLISHING	LAB PRACTICUM: USE OF MIRROR, FULCRUM AND PORTE POLISHER ON MANIKIN EXCERCISES USING PORTE POLISHER. T 3. DEMONSTRATE MODIFIED PEN GRASP WITH MOUTH MIRROR AND OBTAIN FULCRUM POSITION (WITH NO INSTRUMENT) WITH OTHER HAND FOR UPPER ANTERIOR AND LOWER ANTERIOR TEETH. T 4. DEMONSTRATE: 1. RETRACTION OF TISSUES 2. REFLECTING LIGHT 3. INDIRECT LIGHT 4. TRANSILLUMINATION	
	11	EXPANDED FUNCTIONS IN RESTORATIVE	LAB POLICIES AND PROCEDURES CURRENT CURRENT PRINCIPLES OF CAVITY PREPARATION OBJECTIVES	DENTAL CEMENTS, CAVITY LINERS TEMPORARY RESTORATION PROJECT BIOLOGIC CONSIDERATION	DENTAL CEMENTS, CAVITY LINERS TEMPORARY RESTORATIONS OBJECTIVES: SAME AS PERIOD II

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1		EXPANDED FUNCTIONS IN RESTORATIVE		OBJECTIVES: 1. MANIPULATE ZINC OXIDE AND ZINC PHOSPHATE TO BE USED AS A TEMPORARY RESTORATION, AN INTERMEDIARY BASE, OR AS A CEMENT. 2. REMOVE EXCESS CEMENT FROM A PREPARED TOOTH ON A MANIKIN.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	3	PREVENTIVE DENTISTRY II	T 3. DISCUSS THE ROLE OF PLAQUE, AND THE FACTORS IN THE INITIATION OF PERIODONTAL DISEASE. A. DEFINITION OF PERIODONTAL DISEASES. B. DESCRIPTION OF FOUR PERIODONTAL TISSUES. C. ETIOLOGY: INTRINSIC AND EXTRINSIC FACTORS.	T 3. DISCUSS THE ROLE OF PLAQUE, AND THE FACTORS IN THE INITIATION OF PERIODONTAL DISEASE. A. FUNCTION OF PLAQUE AND CALCULUS AS INITIATORS OF PERIODONTAL DISEASE. B. PERIODONTAL POCKET VS. HEALTHY SULCUS C. LOCAL IRRITANTS AND POCKET FORMATION.	T 4. DESCRIBE THE PROGRESSION OF CARIES AND THE EFFECT ON PULPAL AND PERIAPICAL TISSUE A. CAUSES OF PULPAL INJURY B. PATTERN OF DECAY IN DIFFERENT CARIES C. HYPEREMIA, PULPITIS, PERIAPICAL ABCESS, FISTULA.
	2	DENTAL OFFICE MANAGEMENT/ ETHICS/JURISPRUDENCE	SIGNIFICANT EVENTS IN THE HISTORY OF DENTISTRY. ALLIED HEALTH AND PROFESSIONAL RELATIONS CAREER OPTIONS: A. PUBLIC HEALTH B. PRIVATE PRACTICE C. PRIVATE ENTERPRISES OBJECTIVES: NONE		
	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	CLEANSING AND POLISHING AGENTS 1. DEFINITIONS ABRASIVE ABRASION POLISHING 2. FACTORS AFFECTING ABRASIVE ACTION A. CHARACTERISTICS OF ABRASIVE PARTICLES 1. SHAPE 2. HARDNESS 3. BODY STRENGTH 4. ATTRITION RESISTANCE 5. PARTICLE SIZE	LAB PRACTICUM: USE OF MIRROR AND PORTE POLISHER ON MANIKIN. T 4. DEMONSTRATE MODIFIED PEN GRASP WITH MOUTH MIRROR AND PORTE POLISHER AND OBTAIN FULCRUM POSITION FOR LOWER AND UPPER POSTERIOR TEETH.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2		EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	B. METHOD OF APPLICATION OF ABRASIVES 1. QUANTITY APPLIED 2. SPEED OF APPLICATION 3. PRESSURE OF APPLICATION C. TECHNIQUES OF FLOSS AND TAPE 3. ABRASIVE AGENTS A. SILEX B. PUMICE C. ZIRCONUM SILICATE D. ZINC OXIDE T 1. OBJECTIVES FOR PERIOD II COMPARE THE MOST COMMONLY USED ABRASIVES AND POLISHING AGENTS IN DENTISTRY. T 2. EXPLAIN THE DIFFERENT METHODS UTILIZED TO REDUCE FRICTION DURING POLISHING PROCEDURES. T 3. DISCUSS THE TECHNIQUES UTILIZED FOR INTERDENTAL POLISHING WITH DENTAL FLOSS AND TAPE.		
	11	EXPANDED FUNCTIONS IN RESTORATIVE	RUBBER DAM PROJECT (LAB) OBJECTIVES: 1. PLACE AND REMOVE A RUBBER DAM ON A MANIKIN IN LABORATORY AND ON A CLINIC PARTNER IN CLINIC.	RUBBER DAM (CLINIC) PATIENT PARTNER OBJECTIVES: SAME AS FOR PERIOD I, 2ND WEEK	CLASS III RESIN RESTORATION BIOLOGIC CONSIDERATIONS (LAB) OBJECTIVES: PLACE AND FINISH A COMPOSITE RESIN RESTORATION IN A CLASS III CAVITY PREPARATION ON A MANIKIN IN LABORATORY.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	3	PREVENTIVE DENTISTRY II	T4 DESCRIBE THE PROGRESSION OF CARIES AND THE EFFECT ON PULPAL AND PERIAPICAL TISSUE. A. HYPEREMIA, PULPITIS, PERIAPICAL ABSESS, FISTULA (CONTINUED). B. PROTECTIVE MECHANISMS OF PULP.	T5 EVALUATE THE DIFFERENT USES OF FLUORIDE AS A PRIMARY PREVENTIVE MEASURE. A. DEFINE B. MEANS THAT FLUORIDE BECOMES AVAILABLE TO TEETH. C. THEORY OF FLUORIDE EFFECT. D. CHARACTERISTICS, ADVANTAGES, AND APPLICATION OF SODIUM STANNOUS, ACIDULATED PHOSPHATE FLUORIDE. E. CONTRAINDICATION OF STANNOUS FLUORIDE.	T5 EVALUTE THE DIFFERENT USES OF FLUORIDE AS A PRIMARY PREVENTIVE MEASURE. A. WATER FLUORIDATION. B. DENTAL FLUOROSIS. C. BENEFITS OF WATER FLUORIDATION D. PICK BEST FLUORIDE THERAPY FOR PATIENT.
3	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	INTERPERSONAL RELATIONS: A. DENTIST-PATIENT. B. AUXILIARY-PATIENT. C. DENTAL HEALTH TEAM MEMBERS. ETHICAL RESPONSIBILITY OF THE DENTAL AUXILIARY. OBJECTIVES: 1. RELATE THE IMPORTANCE OF GOOD PERSONAL RELATIONS AMONG TEAM MEMBERS TO A SUCCESSFUL DENTAL PRACTICE. 2. RECOGNIZE THE IMPORTANCE OF ETHICAL RESPONSIBILITIES TO SELF, PROFESSION AND COMMUNITY. 3. DISCUSS IN CLASS, THE ETHICAL IMPLICATIONS OF COMMUNICATION SKILLS BOTH VERBAL AND NON VERBAL IN THE PROCEDURES OF PATIENT MANAGEMENT.		

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	POLISHING PROCEDURES. FACTORS TO TEACH PATIENTS: 1. PLAQUE CONTROL TO RETAIN POLISHING EFFECT. 2. INDISCRIMINATE USE OF ABRASIVES. 3. SEQUENCE OF POLISHING USE OF DENTAL FLOSS. T1 DESCRIBE THE COMPLETE SEQUENCE TO BE FOLLOWED IN POLISHING WITH: A. PORTE POLISHER B. ENGINE POLISHER T2 RELATE THE CONCEPT OF PREVENTION TO THE RATIONALE FOR PLAQUE CONTROL TO RETAIN POLISHING EFFECT.	LAB. PRACTICUM: MOTOR DRIVEN INSTRUMENT PROPHY ANGLE WITH RUBBER CUP ON MANIKIN. T3 DEMONSTRATE MODIFIED PEN GASP WITH MOUTH MIRROR AND OBTAIN FULCRUM POSITION UTILIZING THE PROPHY ANGLE IN ALL AREAS OF THE MOUTH.	
3	11	EXPANDED FUNCTIONS IN RESTORATIVE	CLASS III RESIN REST. (LAB.) OBJECTIVES: SAME AS OBJECTIVES FOR PERIOD III, WEEK #2. CLASS III RESIN RESTORATION (CLINIC)	CLASS III RESIN RESTORATION (CLINIC) OBJECTIVES: 1. PLACE AND FINISH A COMPOSITE RESIN RESTORATION ON A PATIENT IN CLINIC.	CLASS IV RESIN RESTORATION (LAB.) OBJECTIVES: 1. PLACE AND FINISH A COMPOSITE RESIN RESTORATION IN A CLASS IV CAVITY PREPARATION ON A MANIKIN IN LABORATORY.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	3	PREVENTIVE DENTISTRY II	T6 EVALUATE THE USE OF PIT AND FISSURE SEALANT AS A PRIMARY PREVENTIVE PROCEDURE. A. DEFINITION B. MECHANISM OF ACTION. C. OBJECTIVES D. INDICATIONS E. CONTRAINDICATIONS	T6 EVALUATE THE USE OF PIT AND FISSURE SEALANTS AS A PRIMARY PREVENTIVE PROCEDURE. A. RELATIONSHIP TO OTHER PREVENTIVE MEASURES. B. APPLICATION C. FACTORS AFFECTING RETENTION TIME D. PATIENT INFORMATION	T7 ANALYZE PLAQUE CONTROL AS A PRIMARY PREVENTIVE MEASURE. A. DEFINITION B. OBJECTIVES C. PROCEDURES FOR TEACHING PATIENT
4	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	ETHICAL RESPONSABILITY OF THE DENTAL AUXILIARY, THE DENTAL OFFICE: 1. SOLO PRACTICE 2. GROUP PRACTICE (STUDENT REPORT) FACILITIES: OPERATORY, WAITING ROOM, LAB, DARK ROOM. OBJECTIVES: 1. DIFFERENTIATE ON EXAM, BETWEEN ETHICAL AND LEGAL RESPONSABILITIES THAT PERTAIN TO DENTAL AUXILIARY. 2. DIFFERENTIATE ON A WRITTEN EXAM, BETWEEN A SOLO AND A GROUP PRACTICE. 3. DISCUSS IN CLASS HOW DENTAL OFFICE FACILITIES I.E., OPERATORIES, LAB., OFFICE, ETC, CAN AFFECT A DENTAL PRACTICE.		

Second Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	7	Expanded Functions in Preventive Dentistry	Use of Bridge cleaners. T1 Discuss the different materials available to clean fixed bridgework.	Lab. practice. Polishing on lab. partner in clinic. T2 Demonstrate ability to polish coronal surfaces of teeth by utilizing a porte polisher, a fulcrum position and proper working stroke.	
4	11	Expanded Functions in Restorative (Lab.)	Class IV Resin Restoration (Lab.) Objective: Same objectives as period 3, week #3.	Class IV Resin Restoration (Clinic) Objectives: 1. Place and finish a composite resin restoration in a Class IV cavity preparation on a patient in clinic.	Class V Resin Restoration (Lab.) Objectives: 1. Place and finish a composite resin in a Class V cavity preparation on a manikin in laboratory.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	3	PREVENTIVE DENTISTRY II	TO DISCUSS ACQUIRED PELLICLE FORMATION. A. DEFINITION B. FORMATION C. SIGNIFICANCE	T9 EVALUATE DENTAL PLAQUE AS TO FORMATION, CAUSE, EFFECTS, AND PREVENTION. A. DEFINITION OF PLAQUE B. COMPOSITION C. DIFFERENCE OF PLAQUE AND PELLICLE D. CHARACTERISTICS E. FORMATION	T9 EVALUATE DENTAL PLAQUE AS TO FORMATION, CAUSE, EFFECTS, AND PREVENTION. A. REMOVAL OF PLAQUE B. PLAQUE AND CARIES C. PLAQUE AND PERIODONTAL DISEASE
5	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	APPOINTMENT CONTROL: APPOINTMENT BOOK APPOINTMENT BOOK TYPES - ADVANTAGES - DISADVANTAGES BUFFER TIME APPOINTMENT CARD TYPES: A. CANCELLED APPOINTMENT CALL LIST BROKEN APPOINTMENTS RECALL SYSTEMS: TYPES: ADVANTAGES - DISADVANTAGES BANKING PROCEDURES. OBJECTIVES: 1. STATE ON A WRITTEN EXAM, AN EFFECTIVE METHOD TO MINIMIZE BROKEN APPOINTMENTS. 2. STRUCTURE IN A SIMULATED SITUATION, AN APPOINTMENT SCHEDULE CONDUCTIVE TO REDUCING OPERATOR AND STAFF FATIGUE. 3. DESCRIBE ON A WRITTEN EXAM 3 DIFFERENT METHODS OF RECALL SYSTEMS CURRENTLY IN USE IN DENTAL PRACTICE.		

Second Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	7	Expanded Functions in Preventive Dentistry	Fluorides: Application 1. Principles of application A. preparation of teeth B. solution - gel C. isolation D. clock timing E. patient instructions 2. Armamentarium T1 Objectives for Period 5 Describe the benefits and limitations of fluoride - containing prophylaxis pastes, mouth rinses and sprays. T2 Describe the difference between topical fluoride in gel form and solution form.	Lab. practicum: Continue polishing on lab partner in clinic.	
5	11	Expanded Functions in Restorative (Lab.)	Class V Resin Restoration (Clinic) Objectives: 1. Place and finish a composite resin in a Class V cavity preparation on a patient in clinic.	Class I Amalgam Restoration (Lab.) Objectives: 1. Place, carve, and finish an amalgam restoration in a class I cavity preparation on a manikin in the laboratory. 2. Apply cavity varnish to a prepared tooth on a manikin.	Class I Amalgam Restoration (Lab.) Objectives are the same as Period II, week #5.

Second Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	3	Preventive Dentistry II	T 10. Analyze dental calculus as to formation, cause, effects and prevention A. Definition B. Characteristics C. Formation D. Composition E. Removal	T 11. Discuss materia alba and food debris as to composition, characteristics, and removal. A. Definition of materia alba B. Characteristics C. Removal D. Difference between materia alba and plaque E. Definition of food debris F. Derivation G. Removal	T 12. Analyze the relevance of stain formation as a tooth deposit A. Mechanisms of stain formation B. Definitions and difference between extrinsic, intrinsic. endogenous, and exogenous stains. C. Stain removal.
	2	Dental Office Management/ Ethics/Jurisprudence	Midterm: Dental Health payment plans: 1. Triple SSS 2. Blue cross 3. Medicaid 4. Others Objectives:		
	7	Expanded Functions in Preventive Dentistry		Lab Practicum: Complete polishing on lab partner and apply fluoride. Objectives: T 1. Demonstrate the correct armamentarium set-up for a demostration of topical fluoride T 2. Apply fluoride to the teeth utilizing the tray technique or the method of isolation.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	11	EXPANDED FUNCTIONS IN RESTORATIVE	CLASS I AMALGAM RESTORATION (LAB) OBJECTIVE: SAME AS FOR PERIOD II, 5TH WEEK	CLASS I AMALGAM RESTORATION (CLINIC) OBJECTIVE: 1. PLACE, CARVE, AND FINISH AN AMALGAM RESTORATION IN A CLASS I CAVITY PREPARATION ON A PATIENT IN CLINIC. 2. APPLY CAVITY VARNISH TO A PREPARED TOOTH ON A PATIENT IN CLINIC.	CLASS II AMALGAM RESTORATION (LAB) INCLUDING MATRIX AND WEDGE BAND ADAPTATION OBJECTIVES: 1. PLACE AND REMOVE MATRICES AND WEDGES ON A MANIKIN IN LAB. 2. PLACE, CARVE, AND FINISH AN AMALGAM RESTORATION IN A CLASS II CAVITY PREPARATION ON A MANIKIN.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
7	3	PREVENTIVE DENTISTRY II	T 12. ANALYZE THE RELEVANCE OF STAIN REMOVAL AS A TOOTH DEPOSIT A. STAIN REMOVAL (CONTINUED) B. CHARACTERISTICS, APPEARANCE, DISTRIBUTION, AND ETIOLOGY OF YELLOW, GREEN, BLACK LINE, TOBACCO, BROWN, ORANGE, RED, AND METALLIC STAINS.	T 13. ANALYZE THE USE OF A PROPER TOOTHBRUSH AS A PRIMARY PREVENTIVE MEASURE. A. DESIRABLE CHARACTERISTICS B. PROPER BRUSHING PLANE. C. FACTORS IN TOOTHBRUSH SELECTION D. NATURAL VS NYLON BRISTLES E. ADVANTAGE OF SOFT BRISTLES F. TOOTHBRUSH CARE G. ELECTRIC TOOTHBRUSH	T 14. ANALYZE THE DIFFERENT TOOTHBRUSH METHODS PURPOSES, INDICATIONS, TECHNIQUES, AND PROBLEMS OF DIFFERENT METHODS.
	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	GENERAL OFFICE COMMUNICATIONS TELEPHONE CALLS INCOMING OUTGOING INCOMING MAIL SORTING OBJECTIVES: DEMONSTRATE IN A ROLL PLAYING SITUATION, THE PROPER APPROACH TO BE UTILIZED WHEN PLACING AND RECEIVING TELEPHONE CALLS IN A DENTAL OFFICE. PERSON TO PERSON OFFICE COMMUNICATIONS RECEIVING PATIENTS AND VISITORS. SCHEDULING APPOINTMENTS COLLECTING FEES AND ISSUING RECEIPTS DISMISSING PATIENTS. (ROLE PLAYING SITUATION) OBJECTIVES: 1. DISCUSS IN CLASS THE DIFFERENT TYPES OF PAYMENT PLANS AVAILABLE TO THE DENTAL PRACTICE.		

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
7		DENTAL OFFICE MANAGEMENT/ ETHICS/JURISPRUDENCE	2. DEMOSTRATE IN A ROLE PLAYING SITUATION THE PROCEDURES FOR RECEIVING AND DISMISSING PATIENTS.		
	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	SEALANTS: DETECTION OF PIT AND FISSURE CARIES APPLICATION OF SEALANT: 1. CLEAN TOOTH SURFACE 2. ISOLATE TOOTH 3. DRY TOOTH 4. APPLY CONDITIONER 5. RINSE THOROUGHLY 6. DRY AGAIN 7. APPLY SEALANT 8. APPLY U.V. LIGHT 9. RINSE T 1. OBJECTIVES TO PERIOD 7 EXPLAINS THE FACTORS WHICH INFLUENCE RETENTION TIME. T 2. DISCUSS IMPORTANT FACTORS TO TEACH A PATIENT REGARDING SEALANTS.	LAB PRACTICUM: APPLICATION OF SEALANT ON MANIKIN TOOTH. DEMONSTRATE CORRECT METHOD OF UTILIZING "NUVA SEAL" RESIN TO SEAL PIT AND FISSURES BY ACTIVATING U.V. GUN FOR 5-7 MINS BEFORE USING FOLLOWING THE NINE STEPS OUTLINED AND KEEPING U.V. RAY IN CONTACT WITH RESIN FOR 30 SECONDS.	
	11	EXPANDED FUNCTIONS IN RESTORATIVE	CLASS II AMALGAM RESTORATION (LAB) OBJECTIVES: SAME AS PERIOD 3, 6TH WEEK	CLASS II AMALGAM (LAB) OBJECTIVES: SAME AS PERIOD 3, 6TH WEEK	CLASS II AMALGAM (CLINIC) OBJECTIVES: 1. PLACE AND REMOVE MATRICES AND WEDGES ON A PATIENT IN CLINIC. 2. APPLY CAVITY VARNISH TO A PREPARED TOOTH ON A PATIENT IN CLINIC. 3. PLACE, CARVE, AND FINISH AN AMALGAM RESTORATION IN A CLASS II CAVITY PREPARATION ON A PATIENT IN CLINIC.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8	3	PREVENTIVE DENTISTRY II	T 14. ANALYZE THE DIFFERENT TOOTHBRUSHING METHODS. A. REASONS FOR OCCLUSAL AND TONGUE BRUSHING B. EFFECTS OF IMPROPER TOOTHBRUSHING C. CONTRAINDICATIONS	T 15. DISCUSS INTERDENTAL PLAQUE CONTROL A. OBJECTIVES B. AIDS AVAILABLE, TECHNIQUES, INDICATIONS AND CONTRAINDICATIONS.	T 14, 15. ROLE PLAYING ON PATIENT INSTRUCTION ON BRUSHING AND FLOSSING.
	2	DENTAL OFFICE MANAGEMENT/ ETHICS/JURISPRUDENCE	SUPPLY CONTROL: METHODS ORDERING PHONE VS MAIL BOOKKEEPING SYSTEM P.B.P. ADVANTAGES - DISADVANTAGES (STUDENT REPORT) OBJECTIVES: STATE ON A WRITTEN EXAM A METHOD TO MAINTAIN EFFICIENT SUPPLY CONTROL IN A DENTAL PRACTICE.		
	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	CARE OF HYPERSENSITIVE TEETH FACTORS CONTRIBUTING TO HYPERSENSITIVITY 1. EXPOSURE OF CEMENTUM AND DENTIN METHODS FOR DESENSITIZING 1. SELF CARE A. PLAQUE CONTROL B. DENTIFRICE C. SELF APPLIED FLUORIDE D. DIET	LAB PRACTICUM: DESENSITIZING TECHNIQUE ON MANIKIN T 4. DEMONSTRATE ON A MANIKIN TOOTH, THE CORRECT TECHNIQUE FOR A DESENSITIZING TREATMENT UTILIZING A SODIUM FLUORIDE AQUEOUS SOLUTION.	

Second Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8		Expanded Functions in Preventive Dentistry	T 1. Objectives for period 8 Discuss the effects of cooling agents on a tooth with sensitivity in the cervical area. T 2. Discuss the factors contributing to the hypersensitivity of a tooth. T 3. Compare the effects of a dentifrice containing strontium chloride and one containing sodium monofluorophosphate.		
	11	Expanded Functions in Restorative	Excess cement removal project (lab) Objectives: Remove excess cement from a prepared tooth on a manikin.	Polishing amalgam project (lab) Objectives:	Polishing amalgam project (clinic) Objectives:

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	3	PREVENTIVE DENTISTRY II	T16 DISCUSS DENTRIFICES AND MOUTHWASHES A. OBJECTIVES OF MOUTH RINSING B. PURPOSES AND USES OF MOUTHWASH C. FACTORS IN DENTRIFICE SELECTION D. DIFFERENCES BETWEEN COSMETIC AND THERAPEUTIC DENTRIFICES.	T17 ANALYZE THE DIFFERENT ELEMENTS OF A BALANCED DIET AND THEIR IMPORTANCE. A. DEFINITIONS - DIET, METABOLISH, NUTRITION. B. PROTEINS - IMPORTANCE, METABOLISM, DEFICIENCY. C. CARBOHYDRATES - IMPORTANCE, METABOLISH, DEFICIENCY, EXCESS.	T17 ANALYZE THE DIFFERENT ELEMENTS OF A BALANCED DIET AND THEIR IMPORTANCE. A. GREASES - IMPORTANCE, METABOLISM, DEFICIENCY, EXCESS. B. MINERALS - IMPORTANCE, DEFICIENCIES.
9	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	FILING SYSTEM: ALPHABETICALLY NUMERICAL CROSS - INDEX (STUDENT REPORT)		
9	7	EXPANDED FUNCTIONS PREVENTIVE DENTISTRY	DENTAL IMPRESSIONS 1. CLINICAL PROCEDURES A. ASSEMBLE MATERIAL AND EQUIPMENT. 2. PREPARE PATIENT A. EXPLAIN PROCEDURE B. DRAPE C. INSPECT ORAL CAVITY D. FREE MOUTH OF DEBRIS E. DRY TEETH F. PREVENTION OF GAGGING T1 OBJECTIVES OF PERIOD 9: DESCRIBE THE PROBLEMS THAT MAY EXIST WHICH MAY INTERFERE WITH DIRECT OCCLUSION OF STUDY MODELS.	LAB. PRACTICUM: IMPRESSION MAKING ON LAB PARTNERS, INCLUDING A WAX BITE. TAKE AN IMPRESSION ON A LAB PARTNER BY: A. SELECTING PROPER TRAY B. BEADING OF TRAY AS NEEDED C. MIX IMPRESSION MATERIAL D. FILL IMPRESSION TRAY E. PRE-COAT UNDER-COAT TRAY F. PROPER REMOVAL OF TRAY TAKE A WAX BITE ON A LAB PARTNER.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	11	EXPANDED FUNCTIONS IN RESTORATIVE	CLINIC OR LABORATORY.	CLINIC OR LABORATORY	CLINIC OR LABORATORY

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	3	PREVENTIVE DENTISTRY II	T17 ANALYZE THE DIFFERENT ELEMENTS OF A BALANCED DIET AND THEIR IMPORTANCE. A. GREASE - SOLUBLE VITAMINS, IMPORTANCE DEFICIENCIES, EXCESS. B. WATER - SOLUBLE VITAMINS, IMPORTANCE, DEFICIENCIES.	T17 ANALYZE THE DIFFERENT ELEMENTS OF A BALANCED DIET AND THEIR IMPORTANCE. A. WATER IN DIET B. MALNUTRITION C. DIET AND ORAL HEALTH D. BALANCED DIET	T18 ANALYZE THE DIET OF A PATIENT AND MAKE A DIET ANALYSIS. A. CARBOHYDRATE INTAKE B. EXPOSURE TIME C. COMPUTATIONS
10	2	DENTAL OFFICE MANAGEMENT/ ETHICS/ JURISPRUDENCE	DENTAL JURISPURDENCE INTRODUCTION TO LEGAL ASPECTS LEGISLATION IN PUERTO RICO. OBJECTIVES: 1. DISCUSS IN CLASS, THE DENTAL PRACTICE ACT AND HOW IT RELATES TO THE DENTAL AUXILIARY IN PUERTO RICO.		
10	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	SUTURE REMOVAL SUTURING TECHNIQUES: 1. INTERRUPTED SUTURES 2. CONTINUOUS PROCEDURE FOR REMOVAL: 1. ARMENTARIUM 2. PATIENT EXAMINATION 3. PREPARATION OF PATIENT 4. RETRACTION 5. STEPS FOR REMOVAL 6. PRECAUTIONS T1 OBJECTIVE FOR PERIOD 10: DESCRIBE THE PROCEDURE FOR REMOVAL OF INTERRUPTED SUTURES AND CONTINUOUS SUTURES.	CLINIC PRACTICE: T1 DEMONSTRATE ABILITY TO MAKE DENTAL IMPRESSIONS ON A CLINIC PATIENT BY: 1. SELECTING PROPER TRAY 2. BEADING OF TRAY AS NEEDED 3. MIX IMPRESSION MATERIAL 4. FILL IMPRESSION TRAY 5. PRE-COAT UNDER-COAT TRAY 6. PROPER INSERTION OF TRAY 7. PROPER REMOVAL OF TRAY T2 DEMONSTRATE ABILITY TO TAKE A WAX BITE ON A CLINIC PATIENT.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	11	EXPANDED FUNCTIONS IN RESTORATIVE	CLINIC OR LABORATORY	CLINIC OR LABORATORY	CLINIC OR LABORATORY.

Second Trimester 01 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
11	3	Preventive Dentistry II	T18 Analyze the diet of a patient and make a diet analysis.	T18 Analyze the diet of a patient and make a diet analysis. A. Practice diet analysis.	T18 Analyze the diet of a patient and make a diet analysis. A. Practice diet analysis.
11	2	Dental Office Management/ Ethics/ Jurisprudence	Malpractice Certification and Licensure Professional Associations Objectives: 1. Differentiate on an exam, between liability, malpractice, technical assault and breach of contact, in the practice of dentistry. 2. Discuss in class the role of the certifying and licensing boards for dental auxiliaries.		
11	7	Expanded Functions in Preventive Dentistry	Practical Evaluation	Clinic Practice: T1 Demonstrate modified pen grasp with mouth mirror and obrain fulcrum position utilizing the prophy angle in all areas of the mouth.	
11	11	Expanded Functions in Restorative	Clinic or laboratory.	Clinic or laboratory.	Clinic or laboratory.

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12	3	PREVENTIVE DENTISTRY II	FINAL EXAM	FINAL EXAM	
	1	DENTAL OFFICE MANAGEMENT/ ETHICS/JURISPRUDENCE	FINAL EXAM/EVALUATION		
	7	EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY	PRACTICAL EVALUATION	CLINIC PRACTICE: ✓ T 1. GIVEN A PATIENT WITH DEPOSIT FREE TEETH APPLY TOPICAL FLUORIDE TO THE TEETH BY: A. PRIOR TO APPLICATION HAVE INSTRUCTOR DECIDE WHETHER A POLISHING IS NECESSARY. B. DRY TEETH PRIOR TO APPLICATION C. CORRECTLY PLACE COTTON ROLLS SO THAT THEY DO NOT TOUTH TEETH AND USE SALIVA EJECTOR. D. MAINTAIN CONTINUED CONTACT OF FLUORIDE WITH THE TEETH FOR THE RECOMMENDED PERIOD OF TIME FOR OPTIMAL EFFECTS. E. INFORM PATIENT OF PAST-OPERATIVE PRECAUTIONS IN ORDER THAT THE EFFECTIVENESS OF THE TREATMENT MAY BE HAMPERED. T 2. EXPLAIN FLUORIDATION TO A PATIENT INCLUDING THE OPTIMAL LEVEL OF FLUORIDE IN THE WATER TO PREVENT CARIES AND THE LEVEL IN THE WATER THAT MAY CAUSE DENTAL FLUOROSIS.	

SECOND TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12		EXPANDED FUNCTIONS IN PREVENTIVE DENTISTRY		T 3. DEMONSTRATE THE "ROLE TECHNIQUE" TOOTHBRUSHING METHOD TO A PATIENT BY UTILIZING THE PATIENTS STUDY MODELS TO ILLUSTRATE AREAS OF PLAQUE RETENTION BY PAINTING THEM IN RED, DEMONSTRATE THE BRUSHING TECHNIQUE ON THE MODELS, HAVE THE PATIENT PRACTICE TECHNIQUE ON MODELS, HAVE PATIENT PRACTICE BRUSHING ON OWN TEETH. T 4. DEMONSTRATE CORRECT USE OF DENTAL FLOSS FIRST ON PATIENT'S TEETH THEN HAVE PATIENT PRACTICE ON OWN TEETH.	
	11	EXPANDED FUNCTIONS IN RESTORATIVE	*CLINIC OR LABORATORY	CLINIC OR LABORATORY	CLINIC OR LABORATORY

* THIS TIME IS PROVIDED FOR REINFORCEMENT.

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	1	HEAD AND NECK ANATOMY	INTRODUCTION: COURSE OVERVIEW		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	COURSE OVERVIEW; INTRODUCTION TO ORAL HISTOLOGY AND EMBRYOLOGY OBJECTIVES: 1. DEFINE THE TERMS HISTOLOGY AND EMBRYOLOGY 2. STATE THE COMPONENTS OF A TISSUE		
	2	ORAL PATHOLOGY II	INTRODUCTION AND COURSE OVERVIEW DEVELOPMENT DISTURBANCES OF THE FACE OBJECTIVES: 1. DESCRIBE THE DEVELOPMENTAL PROCESS WHICH CAN CAUSE CLEFT PALATE AND CLEFT LIP. 2. IDENTIFY IN A SERIES OF SLIDES A BIFID UVULA AND COMMISURAL LIP		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	1	HEAD AND NECK ANATOMY	THE TEMPORAL MANDIBULAR JOINT OBJECTIVES: DISCUSS THE ANATOMY OF THE TEMPORAL MANDIBULAR JOINT AND ITS FUNCTIONS.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	GROWTH AND DEVELOPMENT OF THE HUMAN FACE. OBJECTIVES: 1. DISCUSS THE DEVELOPMENT OF THE FACE, BY EXPLAINING THE FORMATION AND FUSION OF THE FACIAL PROCESSES. 2. DESCRIBE THE STRUCTURES PRODUCED BY THE DENTAL LAMINA.		
	2	ORAL PATHOLOGY II	DEVELOPMENTAL DISTURBANCES OF THE FACE AND JAWS OBJECTIVES: 1. IDENTIFY AND DESCRIBE DEVELOPMENTAL DISTURBANCES OF TONGUE: MICROGLOSIA ANKYLOGLOSIA, HAIRY TONGUE AND GEOGRAPHIC TONGUE. 2. EXPLAIN THE SIGNIFICANCE OF FORDYCE'S GRANULES TO PATIENT'S ORAL HEALTH. 3. DISTINGUISH BETWEEN MICROGNATHIA AND MACROGNATHIA. 4. RECOGNIZE TORUS PALATINES AND TORUS MANDIBULARES		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	1	HEAD AND NECK ANATOMY	THE ORAL CAVITY OBJECTIVES: 1. DESCRIBE THE ORAL CAVITY BOUNDARIES 2. POINT OUT, FROM A SERIES OF SLIDES, THE PALATE, TONGUE, PHARYNX, LARYNX, AND RELATED STRUCTURES.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	DEVELOPMENT OF THE TEETH OBJECTIVES: 1. DESCRIBE THE THREE PARTS OF THE TOOTH BUD. 2. DESCRIBE THE THREE STAGES OF TOOTH DEVELOPMENT 3. STATE THE STRUCTURES EACH COMPONENT OF THE TOOTH GERM WILL PRODUCE.		
	2	ORAL PATHOLOGY II	DEVELOPMENTAL DISTURBANCES OF THE TEETH OBJECTIVES: DIFFERENTIATE BETWEEN THE FOLLOWING DEVELOPMENTAL DISTURBANCES INVOLVING SIZE, SHAPE, AND NUMBER OF THE TEETH: MICRODONTIA, MACRODONTIA, GEMINATION, FUSION, CONCRESCENCE, DILACERATION, SUPERNUMERARY TEETH, ANODONTIA, HYPOCALCEMIA AND DENTAL FLUOROSIS.		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	1	HEAD AND NECK ANATOMY	THE SALIVARY GLANDS OBJECTIVE: DISTINGUISH THE MAJOR SALIVARY GLANDS FROM THE MINOR SALIVARY GLANDS, THEIR DUCTS AND THEIR FUNCTIONS.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	DEVELOPMENT OF THE TEETH OBJECTIVES: SAME AS FOR 3RD WEEK.		
	2	ORAL PATHOLOGY II	DEVELOPMENTAL DISTURBANCES OF THE TEETH (CONT.) AND ORAL MANIFESTATIONS OF SYSTEMIC DISEASES. OBJECTIVES: 1. DIFFERENTIATE ON A WRITTEN EXAM THE TERMS AMELOGENESIS IMPERFECTA, DENTINOGENESIS IMPERFECTA AND ENAMEL HYPOPLASIA. 2. LIST CLINICAL, RADIOGRAPHICAL AND HISTOLOGICAL FEATURES OF A PERIAPICAL ABSCESS, GRANULOMAS AND APICAL CYSTS.		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	1	HEAD AND NECK ANATOMY	PARTIAL EXAMINATION		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	CONCEPTS OF GENERAL HISTOLOGY OBJECTIVES: 1. DESCRIBE THE COMPONENTS OF A TISSUE 2. DESCRIBE THE CLASSIFICATION OF TISSUES IN RELATION TO FUNCTION.		
	2	ORAL PATHOLOGY II	ORAL MANIFESTATIONS OF SYSTEMIC DISEASES, LESIONS OF ORAL MUCOSA OBJECTIVES: 1. LIST CLINICAL AND RADIOGRAPHIC FEATURES OF FOCAL SCLEROSING OSTEOMYELITIS 2. DEFINE AND BE ABLE TO DIFFERENTIATE THE FOLLOWING LESIONS OF THE ORAL MUCOSA: MACULE, PAPULE, VESICLE, BRILLAE, EROSION, NODULE.		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	1	HEAD AND NECK ANATOMY	THE MUSCLES OF MASTICATION OBJECTIVES: DIFFERENTIATE THE FUNCTIONS OF THE MASTICATORY MUSCLES.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	MIDTERM EXAM		
	2	ORAL PATHOLOGY II	ORAL MANIFESTATIONS OF SYSTEMIC DISEASES. OBJECTIVES: DESCRIBE THE CLINICAL MANIFESTATIONS OF TUBERCULOSIS, PREGNANCY TUMOR, AND SYPHILIS.		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
7	1	HEAD AND NECK ANATOMY	NASAL AND PARANASAL SINUSES OBJECTIVES: LOCATE THE NASAL AND PARANASAL SINUSES ON A SKULL		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	HISTOLOGY OF ENAMEL AND DENTIN OBJECTIVES: 1. STATE ENAMEL'S PHYSICAL AND CHEMICAL PROPERTIES. 2. DESCRIBE ENAMEL FORMATION 3. DESCRIBE DENTIN FORMATION 4. STATE THE MODIFIED TYPES OF DENTIN 5. COMPARE PRIMARY AND SECONDARY DENTIN 6. EXPLAIN THE ROLE OF THE INNER DENTAL EPITHELIUM DURING THE FORMATION PROCESS OF DENTIN AND ENAMEL. 7. COMPARE THE MINERALIZATION PROCESS OF DENTIN AND ENAMEL		
	2	ORAL PATHOLOGY II	PARTIAL EXAMINATION AND DISCUSSION		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8	1	HEAD AND NECK ANATOMY	THE TRIGEMINAL AND FACIAL NERVES OBJECTIVES: LIST THE TRIGEMINAL AND FACIAL NERVES WITH THEIR FUNCTIONS.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	HISTOLOGY OF DENTAL CEMENTUM AND PULP OBJECTIVES: 1. EXPLAIN THE DEVELOPMENT OF THE PULP 2. COMPARE THE PULP IN A NEWLY ERUPTED TOOTH AND AGED TOOTH. 3. STATE THE FUNCTION AND LOCATION OF THE APICAL FORAMEN. 4. DESCRIBE CEMENTUM FORMATION AND CHEMICAL COMPOSITION 5. STATE THE FUNCTIONS OF CEMENTUM		
	2	ORAL PATHOLOGY II	ORAL MANIFESTATIONS OF SYSTEMIC DISEASES (CONT) OBJECTIVES: DESCRIBE THE CLINICAL MANIFESTATIONS OF MONILIASIS, A.N.U.G. AND APHTOUS ULCER.		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	1	HEAD AND NECK ANATOMY	RELATION OF ROUTES OF BLOOD SUPPLY, LYMPHATIC SYSTEM AND TRANSMISSION OF DISEASE TO THE BODY. OBJECTIVES: TRACE MAIN ROUTES OF THE BLOOD SUPPLY IN THE HEAD AND NECK ON A WRITTEN EXAM.		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	PERIODONTAL LIGAMENT AND ALVEOLAR PROCESS OBJECTIVES: 1. DESCRIBE THE FORMATION OF THE PERIODONTAL LIGAMENT. 2. STATE THE SEVEN PRINCIPAL FIBERS, THEIR ORIGIN, INSERTION AND FUNCTION. 3. STATE STRUCTURAL COMPONENTS OF ALVEOLAR PROCESS. 4. DIFFERENTIATE BETWEEN COMPACT AND SPONGY BONES. 5. LIST THE FACTORS INFLUENCING THE PRESENCE OF SPONGY BONE.		
	2	ORAL PATHOLOGY II	TRAUMATIC CONDITIONS OBJECTIVES: DEFINE LICKEN PLANUS AND LEUKOPLAKIA		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	1	HEAD AND NECK ANATOMY	FINAL EXAM		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	ORAL MUCOSA AND GINGIVA OBJECTIVES: 1. DEFINE ORAL MUCOUS MEMBRANE 2. STATE THE THREE TYPES OF ORAL MUCOSA, THEIR FUNCTIONS AND LOCATIONS 3. DESCRIBE THE SUBDIVISIONS OF THE GINGIVA, INCLUDING LOCATION AND CLINICAL APPEARANCE 4. DEFINE THE DENTOGINGIVAL JUNCTION AND DESCRIBE ITS IMPORTANCE.		
	2	ORAL PATHOLOGY II	PIGMENTED LESIONS IN ORAL CAVITY, ANGULAR CHEILOSIS, LEUKOPLAKIA, LICKEN PLANUS OBJECTIVES: 1. DESCRIBE THE MOST COMMON PIGMENTED LESIONS IN THE ORAL CAVITY 2. DEFINE ANGULAR CHEILOSIS AND ITS ETIOLOGIC FACTORS 3. DEFINE LICKEN PLANUS AND LEUKOPLAKIA AND MENTION THE MOST COMMON PLACES OF OCCURRENCE INTRA-ORALLY		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
11	2	ORAL HISTOLOGY AND EMBRYOLOGY	TOOTH ERUPTION OBJECTIVES: 1. RELATE THE MECHANISM OF TOOTH ERUPTION TO CLINICAL CONSIDERATIONS 2. DESCRIBE THE PROCESS OF SHEDDING OF DECIDUOUS TEETH AND RELATE IT TO THE ERUPTION OF THE PERMANENT TEETH. 3. COMPARE THE PULP IN A NEWLY ERUPTED TOOTH AND AGED TOOTH.		
	2	ORAL PATHOLOGY II	COURSE REVIEW		

THIRD TRIMESTER 01 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12	2	ORAL PATHOLOGY II	FINAL EXAMINATION AND DISCUSSION		
	2	ORAL HISTOLOGY AND EMBRYOLOGY	FINAL EXAMINATION AND DISCUSSION		

Summer Session 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	9	Periodontics	Introduction and course overview, Review of Periodontal tissues and nomenclature. Clinical characteristics of Periodontal tissue. Ethiology of Periodontal Disease. Objectives: 1. Explain location and function of periodontal structures. 2. Describe type location and function of the periodontal ligaments. 3. Describe the alveolar process considering the anatomical relation to the teeth they surround. 4. Explain the functions of cementum. 5. Describe the etiology of Periodontal disease. 6. Describe Periodontal disease considering affected areas and characteristics of the condition.	Quiz, Local ethiological factors, systemic etiological factors. Objectives: 1. Describe etiology of periodontal disease. 2. Analyze periodontosis. 3. Evaluate gingiva and periodontal pocket formation. 4. Describe different periodontal problems.	

SUMMER SESSION 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	24	ADVANCED PREVENTIVE DENTISTRY	GOAL ORIENTATION. INTRODUCTION TO ADVANCED CLINICAL TECHNIQUES: THE DENTAL HYGIENIST APPOINTMENTS THE DENTAL HYGIENIST DENTAL HYGIENIST SERVICES 1. MEDICAL-DENTAL HISTORY TAKING. 2. ORAL INSPECTION, USE OF EXPLORER AND MIRROR. OBJECTIVES: T1 DISCUSS WHAT A HYGIENIST IS AND DOES. T2 DEFINE DENTAL HYGIENE. T3 EXPLAIN THE SERVICES A DENTAL HYGIENIST PROVIDES. T4 DESCRIBE HOW THE PRACTICE OF DENTAL HYGIENE IS RELATED TO: A. THE PRACTICE OF DENTISTRY. B. TOTAL HEALTH CARE. (LAB) MEDICAL-DENTAL HISTORY TAKING ON LABORATORY PARTNER. T 1. PRACTICE MEDICAL-DENTAL HISTORY TAKING ON LAB PARTNER AND NOTING ANY PAST HISTORY OF DISEASE TO INCLUDE. T 2. OBTAIN AND INTERPRET A THOROUGH MEDICAL, PERSONAL AND DENTAL HISTORY.	ORAL INSPECTION DENTAL CHARTING 1. EXTRAORAL INSPECTION A. VISUAL B. PALPATION 2. INTRAORAL INSPECTION A. VISUAL B. PALPATION C. CARIES DETECTION D. PERIODONTAL DISEASE E. CLASSIFICATION OF OCCLUSION (REVIEW) F. HABITS DENTAL CHARTING ON LAB. PARTNER EXTRAORAL/INTRAORAL INSPECTION PRACTICE ON LAB PARTNER T 1. CONDUCT A SOFT TISSUE EXAM OF THE FACE, LIPS, AND ORAL CAVITY T 2. OBSERVE AND RECORD THOSE AREAS WHICH APPEAR TO DEVIATE FROM THE NORMAL. T 3. LIST AND PERFORM THE SYSTEMATIC AMERICAN CANCER SOCIETY ORAL INSPECTION. T 4. SCREEN EACH PATIENT FOR SUSPICIOUS LESIONS BY MEANS OF DIRECT OBSERVATION AND PALPATION. T 5. EXPLAIN THE DISTINCTION BETWEEN DIAGNOSIS AND CHARTING.	CALCULUS: MODE OF ATTACHMENT DISTRIBUTION INSTRUMENTS: SICKLE SCALER HOE SCALER CHISEL SCALER DESIGN PURPOSE USE LAB. PRACTICUM APPLICATION OF SCALERS ON MANIKIN T 1. DESCRIBE DENTAL CALCULUS, MODE OF ATTACHMENT AND DISTRIBUTION. T 2- DESCRIBE USES AND PRINCIPLES OF ACTIVATION OF THE SICKLE SCALER.

Summer Session 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	9	Periodontics	Classification of Periodontal Diseases: Diagnostic Signs and Symptoms, Radiographic Interpretations, Gingival Diseases; Root Planing and Curettage Procedures; Healing Process Objectives —Describe the functions of plaque, materia alba, and calculus as initiator of inflammatory periodontal disease. —Evaluate oral hygiene effect on the tissues of the oral cavity. —Analyze predisposing etiological factors created by inadequate dental restoration prosthesis and food impaction. —Explain the effect of occlusal forces and para-functional occlusal habits upon the tissues of the periodontium.	Partial Exam Periodontal Conditions Objectives --Evaluate mouth breathing as predisposing factors in the etiology of periodontal disease. --Explain root planing and gingival curettage procedures. --Evaluate principles of periodontal surgery. --Explain the periodontal healing process. --Explain the procedure for periodontal dressing application.	
	24	Advanced Preventive Dentistry	Instruments: Curet Design, purpose, uses Review of root anatomy Objectives: T1 Describe and demonstrate use of the curet. T2 Relate the concept of instrument design to the utilization of the curet at a particular tooth surface. (Lab.) Practicum on manikin. Application of curet and use of scalers.	Instrumentation: Root Planing and soft tissue curettage techniques. T1 List instruments used for scaling, root planing and soft tissue curettage. Lab practicum on manikin. Use or curet T1 Describe and demonstrate the correct techniques for root planing and curettage.	Periodontal charting: Principles of charting Procedures for charting Radiographic exam Sequence code for charting T1 Correctly chart a perio condition as dictated. Lab Practicum Perio charting with lab partner T1 Correctly chart a periodontal condition in a simulated condition.

Summer Session 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	9	Periodontics	Periodontal conditions; Periodontal surgery; gingivectomy and gingivectomy film Objectives —Describe the role of the systemic factors in the etiology of periodontal disease. —Explain the diagnostic signs and symptoms of periodontal disease. —Evaluate gingivitis according to clinical characteristics, etiology, pathogenesis, prognosis, and treatment. —Explain how systemic factors modify chronic gingivitis. —Analyze etiology, characteristics, and treatment of gingival enlargement.	Acute Periodontal Problems Objectives —Discuss the uses of gingivectomy, osteoplasty, periodontal flap and temporary stabilization.	
	24	Advanced Preventive Dentistry	Oral Health Indices: Plaque Bleeding point Periodontal T1 Correctly chart a perio condition in a simulated situation to include a plaque index, bleeding point and a perio index. T2 Explain three phases of a total treatment plan. Lab practicum: Oral Health Indices Practical exam on the use of the scalers.	Diagnostic Aids: Fiber Optics Uses Radiographs Perio interpretation Phase microscope (demo) Patient motivation T1 Discuss the role of the phase microscope as an educational motivational aid. Lab practicum: Ultrasonics: Cavitron use. T1 Discuss the cavitron, its use, indications for use and contra-indications. T2 Define the term "gross scaling". T3 Contrast the effect of post operatory healing following ultrasonic scaling and manual scaling.	Lab practicum: Ultrasonic (cavitron) Diagnostic aids Fisher optics Phase microscope Practical exam on use of curets T1 Demonstrate use of the cavitron. Instrument sharpening Sharpening stones Basic principles of sharpening Sharpening procedures Lab practicum: Sharpening T1 Discuss advantages of keeping scalers and curets sharp at all times. T2 Explain the purpose of instrument sharpening and the effect of a dull instrument on scaling procedures.

Summer Session 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	9	Periodontics	Temporary stabilization: Post surgery oral physiotherapy. Periodontal pack demonstration. Course overview. - Describe post survery oral physiotherapy. - Describe tooth sensitivity to thermal changes as a result of periodontal treatment. - Explain the procedure for periodontal dressing application.		
	3	Periodontics		Final Examination	
	24	Advanced Preventive Dentistry	Myofunctional therapy Correct swallow vs. incorrect swallow. T1 Discuss the characteristics of the correct swallow vs. the incorrect swallow. T2 Relate the concept of prevention to the rationale for habit therapy. T3 Differentiate between myofunctional and habit therapy. Lab practicum: Sharpening T1 Sharpen a sickle, hoe or chisel so that the cutting edge is sharp and so that the instrument shape is unaltered. Lab/Clinic Practical exam Prophylaxis patient	Lab/Clinic Prophylaxis patient	Practical exam: Preliminary exam Oral prophylaxis Final exam

First Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	4	Sociology	Course Objectives Evaluation Criteria Pre Test	Social System Social Structure Systems of Social Organization - Quiz Objective #1- Explain the interrelation of the social, cultura, ideological, and economic systems in the preservation of the individual family and community health.	
	4	Dental Health Education	Class Introduction Instructional Objectives Evaluation Procedures Values, attitudes and behavior toward dental health Objective #1 - Clarify students' values, attitudes and behavior with respect to oral health care.	Role of dental auxiliary as a changing agent Education as a Process of Change Objective #2 - Analyze the role of the dental auxiliary as a changing agent.	
	3	Anatomy and Physiology	Course Objectives, Evaluation Procedures, and Pre test	Anatomical Terminology Objective 1. Discuss the anatomical terminology, directions, plane and cavities.	
	3	General Organic and Inorganic Chemistry	Fundamental Concepts Objective Explain the units of measurement. Explain the composition of matter.	Matter and Energy Objective Continue same as first week.	
	2	Pharmacology	Introduction to Pharmacology Nomenclature and Sources of Therapeutic Agents, Drug Classification, Routes of Drug Administration		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	2	PHARMACOLOGY	OBJECTIVES 1. EXPLAIN CLASSIC CONCEPTS IN THE NOMENCLATURE AND SOURCES OF THERAPEUTIC AGENTS. 2. ANALYZE DRUG CLASSIFICATION. 3. EXPLAIN THE ROUTES OF ADMINISTRATION OF DRUGS.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	4	SOCIOLOGY	SYSTEMS OF SOCIAL ORGANIZATION CONCEPTS OF SOCIAL STRATIFICATION	INDICATORS THAT MEASURE SOCIAL CLASSES RELATION BETWEEN SOCIAL GROUPS	
	4	DENTAL HEALTH EDUCATION	EDUCATION AS A PROCESS OF CHANGE OBJECTIVE #3 ANALYZE THE STEPS IN THE LEARNING PROCESS.	FACTORS AFFECTING THE LEARNING PROCESS - PERCEPTION OBJECTIVE #5 DISCUSS PERCEPTION AS A FACTOR INFLUENCING THE LEARNING PROCESS.	
	3	ANATOMY AND PHYSIOLOGY	SUPPORTING PHYSIOLOGICAL PROCESSES OBJECTIVE DESCRIBE THE LIFE SUPPORTING PHYSIOLOGICAL PROCESSES THAT TAKE PLACE WITHIN CELLS.	SUPPORTING PHYSIOLOGICAL PROCESSES CONTINUATION OF THE ANTERIOR PERIOD.	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	THE ATOM OBJECTIVE ANALYZE CHEMICAL BONDINGS -	CHEMICAL BONDING	
	2	PHARMACOLOGY	DRUG ABSORPTION, DRUG DOSAGE, DRUG ELIMINATION, SEDATIVE AND HYPNOTICS OBJECTIVES 1. ANALYZE THE PROCESS OF DRUG ABSORPTION.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	2	PHARMACOLOGY (CONT.)	2. EXPLAIN THE FACTORS AFFECTING DRUG DOSAGE. 3. EXPLAIN THE DRUG ELIMINATION PROCESS. 4. EVALUATE THE USE OF SEDATIVES AND HYPNOTICS IN DENTAL TREATMENT. 5. EXPLAIN THE SPECIAL CONSIDERATIONS THAT SHOULD BE KEPT IN MIND RELATIVE TO THE USE OF SEDATIVE HYPNOTIC DRUGS.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	4	SOCIOLOGY	FAMILY, RELIGION QUIZ OBJECTIVE #3 - RECOGNIZE THAT THE FAMILY CONSTITUTES THE PRIMARY BIOPSICO-SOCIAL UNIT.	POSITIONS AND ROLES OBJECTIVE #2 - EXPLAIN POSITIONS AND ROLES AND CONFLICTING SITUATIONS BETWEEN THE TWO	
	4	DENTAL HEALTH EDUCATION	FACTORS AFFECTING THE LEARNING PROCESS - MOTIVATION QUIZ #2 OBJECTIVE #6 - ANALYZE MOTIVATION AS A FACTOR INFLUENCING THE LEARNING PROCESS.	FACTORS AFFECTING THE LEARNING PROCESS SOCIOCULTURAL QUIZ #4 OBJECTIVE #7 - ANALYZE HOW THE SOCIO-ECONOMIC FACTORS INFLUENCE THE LEARNING PROCESS	
	3	ANATOMY AND PHYSIOLOGY	SKELETAL SYSTEM OBJECTIVES 1. EXPLAIN THE PROCESS OF BONE FORMATION AND DISORDERS OF BONE DEVELOPMENT. 2. DESCRIBE THE HUMAN SKELETON AND VERTICAL COLUMN. 3. EXPLAIN THE FUNCTION OF THE PELVIC GIRDLE AND THE LOWER EXTREMITY.	SKELETAL SYSTEM OBJECTIVE 1. DESCRIBE THE BODY STRUCTURE OF THE THORAX. 2. DISCUSS THE PECTORAL GIRDLE. 3. EVALUATE THE DISEASES AND INJURIES AFFECTING THE SKELETAL SYSTEM. 4. CLASSIFY JOINTS ACCORDING TO THE DEGREE OF MOVEMENT AND STRUCTURAL CHARACTERISTICS.	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	CHEMICAL EQUATIONS OBJECTIVE EXPLAIN THE DIFFERENT TYPES OF CHEMICAL EQUATIONS	GENERAL EQUATIONS (CONTINUED)	

First Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	2	Pharmacology	Narcotic Analgesics, Histamines Objectives 1. Analyze the use of narcotics in dental treatment. 2. Explain the pharmacological actions of histamines.		

First Trimester 02 Year Curriculum

Week	Hours	Course	Period I	Period II	Period III
4	4	Sociology	Study of Culture Nature of Culture Objective #4 - Analyze the elements affecting cultural evaluation	Problems caused by cultural differences Quiz	
	4	Dental Health Education	Factors affecting the learning process Socio-cultural Quiz #4 Objective - Describe how the socio-economic factors influence the learning process.	Instructional Design Objective - Evaluate basic assumptions about instructional design.	
	3	Anatomy and Physiology	Muscular System Objectives 1. Discuss the different types of muscle relating to the structure and functions. 2. Explain the properties of a muscle related to contraction. 3. Discuss the criteria used for naming muscle groups.	Nervous System Objective 1. Evaluate anatomy functions and disorders of the voluntary nervous system.	
	3	Chemistry	First Partial Exam	The gas Laws - Objective Analyze Boyle's, Charles' and Dalton's Gas Laws	
	2	Pharmacology	Allergic Reactions; Anaphylactic Shock Objectives 1. Evaluate clinical manifestations of allergic reactions. 2. Describe signs, symptoms and treatment for anaphylactic shock reaction.		

FIRST TRIMESTER 02 YEAR CURRICULUM

*OVERLAPPING H. ED. OUT OF PLACE

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	4	SOCIOLOGY	SOCIETY, CULTURE AND INDIVIDUAL SOCIALIZATION OBJECTIVE #5 - ANALYZE THE ELEMENTS AFFECTING CULTURAL EVALUATION.	CONCEPT OF VALUES* OBJECTIVE #6 - EXPLAIN THE PROCESS OF VALUES, BELIEFS, AND MORE FORMATION.	
	4	DENTAL HEALTH EDUCATION	INSTRUCTIONAL DESIGN OBJECTIVE - ANALYZE THE CONDITIONS APPLICABLE FOR CHANGING ATTITUDES.	TECHNIQUES FOR ATTITUDES MODIFICATION QUIZ #5	
	3	ANATOMY AND PHYSIOLOGY	NERVOUS SYSTEM OBJECTIVE 1. DESCRIBE THE INVOLUNTARY NERVOUS SYSTEM.	PARTIAL EXAM PARTIAL EXAM	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	OXIDATION - REDUCTION OBJECTIVES- EXPLAIN COMPOSITION OF ACID, BASES, SALTS, AND ELECTROLYTE AS RELATED TO ACID BASE BALANCE IN THE BODY - DESCRIBE AND DISCUSS OXIDATION-REDUCTION AS RELATED TO THE BIOLOGICAL OXIDATION-REDUCTION REACTIONS TAKING PLACE IN THE MITOCHONDRIA OF CELLS.	OXIDATION - REDUCTION (CONTINUED)	
	2	PHARMACOLOGY	ANTIHISTAMINES, HORMONES OBJECTIVES 1. DESCRIBE PHARMACOLOGICAL ACTIONS AND THERAPEUTIC USES OF ANTIHISTAMINES. 2. DISCUSS THE EFFECTS ON THE HUMAN BODY BY THE HORMONES PRODUCED BY THE ENDOCRINE GLANDS.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	4	SOCIOLOGY	ECONOMIC SYSTEMS OBJECTIVE #7 - DISCUSS DIFFERENT ECONOMIC SYSTEMS.	SOCIAL CHANGE QUIZ OBJECTIVE #8 - EVALUATE THE DIFFERENT CHANGE MECHANISMS, CULTURIZATION, DIFFUSION, INVENTION, AND REVOLUTION.	
	4	DENTAL HEALTH EDUCATION	TEACHING MOTOR SKILLS OBJECTIVE - EXPLAIN THE STEPS FOR TEACHING MOTOR SKILLS.	STRATEGIES FOR IDENTIFYING TARGET GROUPS QUIZ # 6	
	3	ANATOMY AND PHYSIOLOGY	REMEDIAL SESSION	RESPIRATORY SYSTEM OBJECTIVE - DESCRIBE THE GENERAL ANATOMICAL AND PHYSIOLOGICAL CONDITIONS WHICH MIGHT AFFECT NORMAL BREATHING.	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	WATER AND LIQUID MIXTURES OBJECTIVE ANALYZE SOLUTION RELATED TO SOLVENT ACTION IN DIGESTION	WATER AND LIQUID MIXTURES (CONTINUED)	
	2	PHARMACOLOGY	ANTIHYPERTENSIVES DIURETICS AND ANTI-ANGINAL AGENTS OBJECTIVES DESCRIBE USES AND EFFECTS OF ANTI HYPERTENSIVES AND HOW THEY CAN AFFECT DENTAL TREATMENT. EXPLAIN USE AND FUNCTIONS OF DIURETICS AND ANTIANGINAL AGENTS.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
7	4	SOCIOLOGY	COMMUNITY BASIC ELEMENTS OBJECTIVE #9 - RECOGNIZE COMMUNITY AS A SOCIAL ENTITY WITH ITS OWN NEEDS, PROBLEMS, AND RESPONSIBILITIES.	COMMUNITY NEEDS OBJECTIVE #9	
	4	DENTAL HEALTH EDUCATION	PLANNING AN EDUCATIONAL ACTIVITY OBJECTIVE - IDENTIFY TARGET GROUPS OF THE COMMUNITY.	EDUCATIONAL STRATEGIES AND EVALUATION TECHNIQUES	
	3	ANATOMY AND PHYSIOLOGY	RESPIRATORY SYSTEM CONTINUATION	RESPIRATORY SYSTEM CONTINUATION	
	3	CHEMISTRY	PARTIAL EXAM	ACID- BASES - SALTS	
	2	PHARMACOLOGY	ANTICOAGULANTS, PRESCRIPTION WRITING OBJECTIVES 1. EXPLAIN USEFULNESS OF ANTICOAGULANTS AND PRECAUTIONS THAT SHOULD BE OBSERVED FOR DENTAL TREATMENT. 2. ANALYZE THE COMPONENTS OF A PRESCRIPTION.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8	4	SOCIOLOGY	PSICO-SOCIAL ASPECTS THE FAMILY OBJECTIVE #10 ANALYZE THE INTERACTION OF GROUPS IN A HEALTH ORGANIZATION.	GROUP DINAMICS OBJECTIVE #10 ANALYZE THE INTERACTION OF GROUPS IN A HEALTH ORGANIZATION.	
	4	DENTAL HEALTH EDUCATION	GROUP REPORTS OBJECTIVE DEVELOP A PLAN FOR A LEARNING ACTIVITY CONSISTENT WITH CLIENTS, LEARNING STYLE, ATTITUDES, AND PREVIOUS EXPERIENCES.	POST TEST	
	3	ANATOMY AND PHYSIOLOGY	DIGESTIVE SYSTEM OBJECTIVE DISCUSS THE DIGESTIVE SYSTEM STRUCTURE AND FUNCTIONS.	DIGESTIVE SYSTEM CONTINUATION	
	3	CHEMISTRY	IONIZATION	INORGANIC CHEMISTRY - FINAL EXAM	
	3	PHARMACOLOGY	PROCESS OF INFECTION, ANTIBIOTICS OBJECTIVES 1. DESCRIBE THE PROCESS OF INFECTION 2. EXPLAIN PROPHYLACTIC INDICATIONS OF ANTIBIOTICS.		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	4	SOCIOLOGY	THE COMMUNICATION PROCESS OBJECTIVE #11 EVALUATE THE BASIC PROCESSES IN COMMUNICATION.	PERCEPTION OBJECTIVE #13 EVALUATE THE DIFFERENT FACTORS THAT INFLUENCE PERCEPTION.	
	4	DENTAL HEALTH EDUCATION	OBJECTIVE ASSESS COMMUNITY NEEDS		
	3	ANATOMY AND PHYSIOLOGY	CIRCULATORY SYSTEM OBJECTIVE DESCRIBE THE CIRCULATORY SYSTEM	CIRCULATORY SYSTEM CONTINUATION	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	INTRODUCTION TO ORGANIC CHEMISTRY OBJECTIVE - DISCUSS COVALENT COMPOUNDS AS RELATED TO THE TYPES OF BONDS THAT MUST BE BROKEN AND REARRANGED IN THE FORMATION OF HIGH ENERGY PHOSPHATE BONDS.	HYDROCARBONS OBJECTIVE EXPLAIN THE HYDROCARBONS AS A CLASS OF ORGANIC COMPOUND.	
	2	PHARMACOLOGY	MEDICAL EMERGENCIES OBJECTIVE EXPLAIN THE IMPORTANCE OF EARLY DETECTION OF MEDICAL EMERGENCIES IN DENTAL HYGIENE PRACTICE		

FIRST TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	4	SOCIOLOGY	MOTIVATION QUIZ OBJECTIVE - DISCUSS HOW MOTIVATIONS INFLUENCE HEALTH PROFESSIONALS AS WELL AS HEALTH CONSUMERS.	STUDY OF POPULATION, SEX, AGE, COMPOSITION OBJECTIVE EVALUATE THE TENDENCIES AFFECTING POPULATION. DESCRIBE FROM A WORLD WIDE, REGIONAL AND LOCAL POINT OR VIEW THE TENDENCIES AFFECTING POPULATION.	
	4	DENTAL HEALTH EDUCATION PRACTICAL EXPERIENCES	OBJECTIVE SELECT TARGET GROUPS		
	3	ANATOMY AND PHYSIOLOGY	EXCRETORY SYSTEM OBJECTIVE DESCRIBE THE STRUCTURE AND FUNCTIONS AND MOST COMMON ABNORMAL CONDITIONS AFFECTING THE EXCRETORY SYSTEM.	EXCRETORY SYSTEM CONTINUATION	
	3	GENERAL ORGANIC AND INORGANIC CHEMISTRY	ALCOHOLS AND ETHERS OBJECTIVE EXPLAIN THE ALCOHOLS AND ETHERS. EXPLAIN THE ALCOHOLS AND ETHERS, AS CLASSES OF ORGANIC COMPOUNDS.	THIRD PARTIAL EXAMINATION	
	2	PHARMACOLOGY	HEMOSTATIC DRUGS, PAIN CONTROL OBJECTIVE 1. EXPLAIN EFFECT AND USE OF HEMOSTATIC DRUG. 2. ANALYZE CLINICAL PROCEDURES FOR THE CONTROL OF PAIN AND FEAR IN THE DENTAL PATIENT.		

First Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
11	4	Sociology	Fertility and Mortality Change Objective #14	Post Test	
	4	Dental Health Education	Objective - Evaluate and select appropriate methods and activities to achieve dental health education goals.		
	3	Anatomy and Physiology	Reproductive System Objective 1. Describe the structure and functions of the reproductive system.	Reproductive System Continuation	
	3	General Organic and Inorganic Chemistry	Aldehydes - Ketones - Acids	Esters - amines	
	2	Pharmacology	Over the counter drug, Review Objective 1. Explain the uses of the most common over-the-counter drugs. 2. Explain the treatment of choice for patients suffering herpes labiales, moniliasis, and labial ulcers.		

First Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12	3	Anatomy and Physiology	Final Exam	Remediative Session	
	4	Dental Health Education	Objective - Develop an educational activity		
	3	Chemistry	Cyclicand Heterocyclic compounds	Organic Chemistry Final Exam	
	1	Pharmacology	Final Examination		

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
1	2	SPECIAL NEEDS PATIENTS	COURSE INTRODUCTION AND PROJECTION OF THE FILM. TECHNIQUES FOR MANAGING THE HANDICAPPED CHILD IN THE DENTAL OFFICE. OBJECTIVE: IDENTIFY AND EXPLAIN THE NATURE AND SCOPE OF HANDICAPPING CONDITIONS.		
1	3	BIOCHEMISTRY AND NUTRITION	INTRODUCTION - COURSE OBJECTIVES CHEMICAL PROCESS OF DIGESTION AND ABSORPTION OF FOODS. THE DIGESTION ENZYMES AND ENDOCRINE GLANDS. OBJECTIVES: DESCRIBE THE PROCESS BY WHICH FOOD IS PREPARED FOR ABSORPTION.	CHEMISTRY OF PROTEINS.	
1	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	COURSE OBJECTIVES EVALUATION PROCEDURES PRE-TEST	BASIC PUBLIC HEALTH CONCEPTS OBJECTIVES: EVALUATE CHARLES WINSLOW AND HANLOV'S DEFINITION OF PUBLIC HEALTH.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
2	2	SPECIAL NEEDS PATIENTS	NATURE AND SCOPE OF THE PROBLEM OF HANDICAPPING CONDITIONS. SPECIAL ARMAMENTATION.		
2	3	BIOCHEMISTRY AND NUTRITION	CHEMISTRY OF PROTEINS NUTRITIONAL VALUE OF PROTEINS	CHEMISTRY OF FATS AND OTHER LIPIDS	
2	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	ROLE OF DENTAL AUXILIARIES IN PUBLIC HEALTH - QUIZ. HEALTH AND DISEASE AS A CONTINUOUS ECOLOGICAL MODEL. OBJECTIVES: 1. EXPLAIN THE ROLE OF A DENTAL AUXILIARY IN A COMMUNITY SETTING. 2. EVALUATE THE CONCEPT OF HEALTH AND DISEASE AS A CONTINUANT.	THE SCIENTIFIC METHOD. OBJECTIVE: VALUE THE IMPORTANCE OF USING BIOSTATISTICS METHODOLOGY IN THE HEALTH SCIENCE.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
3	2	SPECIAL NEEDS PATIENTS	MENTAL RETARDATION		
3	3	BIOCHEMISTRY AND NUTRITION	CHEMISTRY OF CARBOHYDRATES	ROLE OF CARBOHYDRATES IN HUMAN NUTRITION	
3	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	EPIDEMIOLOGICAL METHODS AND BIOSTATISTICS QUIZ. OBJECTIVES: APPLY FUNDAMENTALS OF DESCRIPTIVE BIOSTATISTICS TO THE HEALTH FIELD. VALUE THE IMPORTANCE OF USING BIOSTATISTICS METHODOLOGY FOR THE HEALTH SCIENCES.	FREQUENCY MEASURES. SAME OBJECTIVES AS PERIOD I, WEEK #3.	

Second Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
4	2	Special Needs Patients	Mental retardation. Objectives: Identify and explain the nature of mental retardation.		
4	3	Biochemistry and Nutrition	Interrelationships of C, H, O, Protein and Fat Metabolism	Energy metabolism, Energy requirements and Energy value of foods	
4	4	Dental Public Health and Critique of Dental Literature	Data Collection Objective: Represent and interpret data in tables and graphs and prepare frequency distribution.	Data Analysis - Quiz Objectives: Summarize data classified according to qualitative and group and ungrouped qualitative variables. Evaluate the concept of universe, samples, parameters and statistics.	

SECOND TRIMESTER 02 YEAR CURRICULUM

EEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
5	2	SPECIAL NEEDS PATIENTS	DEAF-MUTE PATIENT BLIND LEARNING DISABILITIES		
5	3	BIOCHEMISTRY AND NUTRITIO	PARTIAL EXAMINATION	FAT SOLUPLE VITAMINS	
5	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	HEALTH INDICATIONS - QUIZ. OBJECTIVE: EVALUATE THE HEALTH INDICATORS USED TO MEASURE THE COMMUNITY HEALTH.	EPIDEMIOLOGY OF ORAL DISEASE - DESCRIPTIVE QUIZ. OBJECTIVE: EXPALIN THE STEPS OF EPIDEMIOLOGICAL STRATEGY.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
6	2	SPECIAL NEEDS PATIENTS	NEUROMUSCULAR DISEASES 1. PARKINSON'S 2. MINIMAL BRAIN DAMAGE 3. EPILEPSY		
6	1.5	BIOCHEMISTRY AND NUTRITION	VITAMIN C, COMPLEX B, B_1, B_{12}, B_6	VITAMIN B COMPLEX: BIOTIN, PANTOTHENIC ACID, VITAMIN C	
6	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	EPIDEMIOLOGY OF ORAL DISEASE OBJECTIVES: DISCUSS THE FRAME OF REFERENCE THAT SERVES AS A CONCEPTUAL BASIS FOR THE DEVELOPMENT OF CHRONIC AND INFECTIOUS DISEASES.	EPIDEMIOLOGY OF ORAL DISEASE SURVEY OF ORAL PROBLEMS. OBJECTIVES: STATE AT LEAST THREE APPLICATIONS AND THREE SOURCES OF DESCRIPTIVE EPIDEMIOLOGY IN ORAL DISEASE.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
7	2	SPECIAL NEEDS PATIENTS	NEUROMUSCULAR DISEASES: 1. CEREBRAL PALSY 2. MUSCULAR DYSTROPHY 3. MULTIPLE SCLEROSIS OBJECTIVE: EXPLAIN THE DIFFERENT TYPES OF NEUROMUSCULAR DISEASES AND THE PROBLEMS WHICH THESE PATIENTS MIGHT PRESENT WHEN PROVIDED ORAL HYGIENE CARE.		
7		BIOCHEMISTRY AND NUTRITION	INTRODUCTION TO THE MINERAL ELEMENTS: CALCIUM, PHOSPHORUS, MAGNESIUM, IRON, COOPER.	FLOUR IN DENTAL HEALTH	
7	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	INTERVENE STRATEGIES. OBJECTIVES: DISCUSS THE PHILOSOPHY OF OBJECTIVES OF THE TEAM PROGRAM.	BASIC ELEMENTS IN HEALTH PROGRAM PLANNING. OBJECTIVES: EXPLAIN GHE DIFFERENT BASIC PRINCIPLES INVOLVED IN THE PLANNING PROCESS.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
9	2	SPECIAL NEEDS PATIENTS	MIDTERM EXAM		
	1.5	BIOCHEMISTRY	FINAL EXAMINATION		
	4	DENTAL PUBLIC HEALTH	PREPARATION OF AN ABSTRACT OBJECTIVE - EVALUATE AN ABSTRACT FROM A SCIENTIFIC RESEARCH DOCUMENT.	SEMINAR DISCUSSION OF RESEARCH ABSTRACTS	

Second Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
8	2	Special Needs Patients	Mid - term Examination		
	3	Biochemistry And Nutrition	Iodine and other trace elements	Partial Examination	
	4	Dental Public Health	Components of a Scientific article Quiz Evaluative criteria for a scientific research Objectives - Evaluate a scientific article	Bibliography reporting Objective - State how statistics proove to be of value in the evaluation of scientific literature.	
9	2	Special Needs Patients	Cleft Palate Cleft lips		
	3	Biochemistry and Nutrition	The Normal diet Food guide for P.P. and U.S.A.	Laboratory Exercises: Food portions measures weights: dietary record	
	4	Dental Public Health	Preparation of an abstract Objective Evaluate an abstract from a scientific research document.	Seminar discussion of research abstracts	

Second Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
10	2	Special Needs Patients	Hematological diseases		
	3	Biochemistry and Nutrition	Food needs of infants, children and adolescents	Food Needs in pregnancy and Lactation; adequate diet for the aged	
	4	Dental Public Health and Critique of Dental Literature	Preparation of an abstract Objective - develop an abstract from a scientific research document.		

Second Trimester 02 Year Curriculum

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
11	2	Special Needs Patients	Aging addiction		
	3	Biochemistry and Nutrition	Cariogenicity of different foodstuffs	Diary form of recording food intake	
	4	Dental Public Health and Critique of Dental Literature	Seminar discussion Objective- Evaluate abstracts	Seminar discussion Objective- Develop a review of the literature about a selected topic in the dental health field.	

SECOND TRIMESTER 02 YEAR CURRICULUM

WEEK	HOURS	COURSE	PERIOD I	PERIOD II	PERIOD III
12	2	SPECIAL NEEDS PATIENTS	FINAL EXAMINATION		
	3	BIOCHEMISTRY AND NUTRITION	DIARY FORM OF RECORDING SWEET INTAKE	EVALUATION OF DIETARY INFORMATION	
	4	DENTAL PUBLIC HEALTH AND CRITIQUE OF DENTAL LITERATURE	FIELD EXPERIENCES CONCURRENT WITH DIDACTIC TEACHING.		

Exhibit J

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
. It is recommended that an Advisory Committee be appointed to provide liaison with the local dental and dental assisting/hygiene community.	1. An Advisory Committee is in the process of being appointed. Invitation letters were sent to the following organizations: a. Colegio de Cirujanos Dentistas de Puerto Rico b. Junta Dental Examinadora c. Asociación de Asistentes Dentales d. Asociación de Higienistas Dentales e. School of Dentistry Two members have been already appointed: a. Dr. Zaida Cesáreo - Junta Dental Examinadora b. Dr. Juan José Vélez - Director of Clinical Affairs - School of Dentistry
2. It is recommended that roles of faculty members involved in program administration be defined, their job descriptions be clarified, and information be communicated to those faculty members.	2. Roles of Department Chairman and Program Director were defined, job descriptions were clarified and informed. See Appendix I.
3. It is recommended that additional storage area for instruments and materials be provided.	3. Additional storage area has been made available and one faculty member is in charge of inventory and requisitions.
4. It is recommended that a sterilization area be established	4. The sterilization area of the School of Dentistry has been made available for the use of the auxiliary students. They will rotate through this area.
5. It is recommended that equipment be modified to provide adequate patient positioning throughout all dental hygiene clinical procedures.	5. Under study and consideration by the Administration.
6. It is recommended that the collection of reference texts for students and faculty use be analyzed and updated.	6. Reference texts for students and faculty has been enlarged and updated. See Appendix II - List of reference texts for students and faculty use have been ordered by the Medical Sciences Campus library.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
It is recommended that faculty make reading and project assignment which will increase utilization of library resources by the dental auxiliary students.	7. A faculty tour to the library was planned and implemented on February 14, 1979. Faculty have been instructed to make reading project assignments in order to increase the utilization of library resources by the students.
It is recommended that a periodontist have input into both the periodontology instruction and clinical experiences to encourage integration of periodontal principles and advanced instrumentation skills.	8. Input of the periodontists of the School of Dentistry into the periodontology instruction is in process. They have revised the Perio course outlines. Clinical experiences generally include consultations made by members of the Perio Department of the School of Dentistry. Seminar IV will include integration of didactic periodontal content with the advanced clinical skills in a team teaching basis with the direct input of a periodontist.
It is recommended that the administration define basic admissions criteria more clearly, specifically related to chemistry, biology, and bilingual prerequisites.	9. The admission requirements are being revised and students will be required 30 credit hours of college level for the academic year 1980-81, which will include: English 6 Spanish 6 Humanities 6 Biological Sciences 6 Electives 6 30 The program requires a reading comprehension in English. This component is evaluated in the College Entrance Examination Board which is utilized as an admission criteria by the University of Puerto Rico. Although Chemistry and Biology are required for admission, not all students take both of these courses during high school. Efforts will be given in selecting students who present both of the courses.
It is recommended that the criteria for admission to Level Two be refined to include graduation from a dental assisting program accredited by the Commission on Accreditation.	10. Has been included as a criterion for admission.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
1. It is recommended that evaluation of admissions criteria to Level Two be an on going process, including the following:	
11a. Evaluation of the prospective students to include assessment of theoretical background, scientific principles and clinical skills.	11a. Assessment of theoretical background and science principles is done through the Comprehensive. Assessment of clinical skills is done throughout the entire expanded functions in restorative and preventive. Outside candidates are assessed individually by a practical-clinical exam.
11b. Revision of the comprehensive examination to test information from Level One that is critical to this entry point of dental hygiene curriculum.	11b. Will be done.
11c. Assessment and necessary remediation of students prior to enrollment in Level Two.	11c. Will be done.
11d. Continued assessment of the criteria used to select the candidates for Level Two.	11d. Will be done.
. It is recommended that the faculty revise course outlines and objectives to reflect the content which is actually presented and the higher levels of learning at which students are being tested.	12. Courses outlines have been revised.
It is recommended that a record keeping system be developed to aid in providing all students with diversified radiographic experience.	13. Instructions have been given to the clinical radiology instructor to institute a record keeping system to aid in providing all students with diversified radiographic experiences.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
4. It is recommended that the dental school's policy be reviewed regarding the minimum interval between a patient's radiographic exposures and that this policy be followed in the dental auxiliary program.	14. It has been done. See appendix III.
5. It is recommended that the curriculum be revised to include required content in communications skills. This course should include both written and oral communication skills in the English language.	15. For academic year 1980-81, 12 college credits will be required in communication skills (Spanish and English). For 1979-80, a core course in communication skills is to be given during the 01 year.
. It is recommended that content related to the nervous, endocrine, and lymphatic systems be added to the Human Biology course and that the time allotted for this course be increased to accommodate the additional content. Further, reference materials should be identified to supplement the instructor's lectures.	16. A course in Anatomy and Physiology is given in the second trimester of the 01 year. The content of Human Biology has been incorporated in it.
. It is recommended that content be added to Level One, Track B concerning therapeutics utilized in the practice of dentistry. Information about general anesthesia should also be included.	17. Included in a course of Pathology and Therapeutics given in the third trimester of the 01 year.
It is recommended that either cardiopulmonary resuscitation instruction be included in the present dental and medical emergencies unit or all students be required to complete the course presently offered at the local hospital.	18. Incorporated in Chairside requirements as an extramural activity.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
9. It is recommended that the content of the Chairside/Dental Materials course be increased to include background in the laboratory procedures associated with removable and complete prosthodontics, including both didactic and laboratory instruction in cleaning and polishing removable appliances and fabricating temporary restoration.	19. The content has been included in Chairside/Dental Materials. Twelve hours have been added to the course.
. It is recommended that the amount of clinical practice experience be increased to approximately 300 hours.	20. Laboratory expanded restorative functions has been restructured. Time was released and assigned to clinical practice. A total of 316 hours will be devoted to clinical practice.
. It is recommended that transferability of general education and basic science courses be determined to insure that they are being taught at an acceptable college level, and provide opportunity for students to work toward a Baccalaureate degree in the future.	21. Under study.
It is recommended that college level communications courses be incorporated into the curriculum including English and speech, which are transferable.	22. See recommendation 15. For 1979-80 a 12 hour course in Communication skills has been implemented in the first trimester of the 01 curriculum.
It is recommended that a college-level transferable general psychology course be offered in place of or in addition to Psychology of Human Interaction.	23. A college-level transferable general psychology course will be implemented in the 01 curriculum.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
4. It is recommended that microbiology be taught in more depth and scope to reflect more adequately principles necessary to the practice of dental hygiene.	24. See Microbiology course outline.
5. It is recommended that anatomy and physiology be more inclusive in content to include the nervous, endocrine, and lymphatic systems.	25. See Anatomy and Physiology course outline.
. It is recommended that the general pathology instruction be increased in scope to include neoplasia and oral manifestations of diabetes, leukemia, and vitamin deficiencies.	26. See Pathology course outline.
. It is recommended that oral pathology instruction be increased in depth to relate pathology to clinical services of dental hygiene and differentiation of pathology clinically.	27. See Pathology course outline.
. It is recommended that the scope of pharmacology be increased to include the interaction of local anesthetics.	28. See Pharmacology course outline.
. It is recommended that the level, depth and scope of dental anatomy be increased to include principles of occlusion, root morphology, and tooth contours.	29. See Dental Anatomy course outline.

PROGRESS REPORT ON RECOMMENDATIONS MADE BY THE COMMISSION ON ACCREDITATION TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
It is recommended that the administration re-evaluate the sequency of sociology in relation to the principles of community dental health.	30. Sociology course is going to be offered in the Summer sessions prior to the 02 curriculum.
It is recommended that basic science content be resequenced to reflect: a. Anatomy and physiology before head and neck anatomy. b. Anatomy and physiology before pathology. c. Microbiology before asepsis. d. Organic chemistry before pharmacology. e. Biochemistry before any nutritional counseling.	31. Basic science content has been resequenced. See curriculum sequence on pages 51 - 52c of the Special Survey Manual for Accreditation.
It is recommended that a course in cardiopulmonary resuscitation be required and completed prior to finishing the preclinical course work.	32. See action taken or recommendation #17.
It is recommended that if the faculty/student ratio is increased, the time allotted for preclinical experiences and the sequence in the curriculum be critically reexamined to ensure that course objectives can be met.	33. There are no plans of changing the faculty/student ratio in the immediate future.
It is recommended that clinical courses be reevaluated in view of the late entry of clinical experience into the curriculum concerning these factors:	34. Patient procurement problems are being discussed with administration of the College of Health Related Professions and the School of Dentistry in order to minimize them. Restorative expanded functions clinical assignments have been discontinued.

PROGRESS REPORT ON RECOMMENDATIONS
MADE BY THE COMMISSION ON ACCREDITATION
TO THE ADMINISTRATION OF THE DENTAL AUXILIARY PROGRAMS

February 26, 1979

RECOMMENDATION	ACTION TAKEN
a. Patient procurement and broken appointment problems. b. Reduced clinic time as a result of scheduled restorative expanded functions clinical assignments. c. Reduced clinical time as a result of scheduled clinical assistants assignments.	
It is recommended that the faculty continue refinement of their clinical evaluation forms to include instrument sharpness and cavitron usage, as well as clearer patient classifications in terms of supragingival and subgingival calculus deposits.	35. Clinical evaluation forms were revised and criteria for instrument sharpness, cavitron usage, and patient classification have been included.
It is recommended that arrangements be made for students to practice adequate patient positioning throughout the clinical procedures.	36. Under consideration.
It is recommended that a seminar be added in the first trimester of the second year and coordinated with Clinic I. Further, it is recommended that the Seminars III and IV ensure integration of advanced clinical skills and clinical experiences.	37. See course outlines for Seminar III, IV, V.

EXHIBIT K

CONFIDENTIAL

EVALUATION REPORT

Commission on Accreditation of Dental and Dental Auxiliary Educational Programs
American Dental Association

SUBMITTED TO:	Dr. Alberto Tossas, Dean
INSTITUTION:	University of Puerto Rico, College of Allied Health Professions
CURRICULUM:	Dental Assisting and Dental Hygiene Programs
DATE:	May 3, 1979

FORMAL REPORT OF THE COMMISSION ON ACCREDITATION OF DENTAL AND DENTAL AUXILIARY EDUCATIONAL PROGRAMS TO THE ADMINISTRATION OF THE UNIVERSITY OF PUERTO RICO ON THE DENTAL ASSISTING AND DENTAL HYGIENE PROGRAMS SAN JUAN, PUERTO RICO*

INTRODUCTION

An evaluation of the dental assisting and dental hygiene programs offered by the University of Puerto Rico was conducted on March 7-9, 1979 by a committee of the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs composed of: Dr. James E. Vaught, Commission representative; Miss Lois Van Meter, consultant in dental assisting; Miss Betsey Alden, consultant in dental hygiene; and Ms. Marsha Palmer, Commission staff member.

Commission objectives are based on the premise that dental auxiliary educational programs should continually strive to improve standards of scholarship and teaching consistent with the purposes and methods of higher education. Recommendations of the visiting committee are numbered and indented under appropriate headings of this report. Implementation of the recommendations can have significant influence in developing the dental auxiliary programs to meet their fullest potential. In addition to the recommendations which relate to accreditation standards, suggestions for program enhancement are offered.

ACCREDITATION HISTORY

Information on the accreditation classifications awarded previously to the dental auxiliary educational programs follows:

Date	Program	Action
July, 1962	Dental Assisting	Provisional Approval
May, 1963	Dental Assisting	Approval
May, 1969	Dental Assisting	Approval
December, 1970	Dental Hygiene	Accreditation Denied
March, 1971	Dental Hygiene	Accreditation Eligible
May, 1972	Dental Hygiene	Conditional Approval
May, 1973	Dental Hygiene	Approval
May, 1977	Dental Assisting	Approval
May, 1977	Dental Hygiene	Accreditation Withdrawn

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*As approved for transmittal by the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs May 3, 1979.

Date	Program	Action
December, 1978	Dental Assisting	Conditional Approval
December, 1978	Dental Hygiene	Accreditation Eligible Denied

This site visit was scheduled as a pregraduation evaluation for the dental hygiene program and a special evaluation of the dental assisting program. The site visit was conducted to determine the degree to which recommendations contained in the December 1978 formal report had been implemented.

While the institution perceives its dental assisting and dental hygiene programs as phases of one program, the report will refer to each phase as a separate program to facilitate evaluation in terms of the Commission's separate standards for dental assisting and dental hygiene educational programs. The University of Puerto Rico's approach to dental auxiliary education consists of three separate curriculum phases. Level One, Track A trains the students to become chairside dental assistants. This program has been lengthened from two to three terms and is now being considered for accreditation. Level One, Track B is a three-term program training the students in both chairside dental assisting and expanded functions, and is currently the accredited dental assisting program. This program has one trimester common with Level One, Track A and two trimesters with courses specific to its own program, including the training in expanded functions. Level Two provides an additional year related specifically to training students for the field of dental hygiene. The second year builds on the curricular content presented in Level One, Track B. For this report, Level One, Tracks A and B will be evaluated by the Requirements and Guidelines for Accredited Dental Assisting Education Programs. Level One, Track B plus Level Two will be evaluated by Requirements and Guidelines for Accredited Dental Hygiene Education Programs.

EDUCATIONAL SETTING

The University of Puerto Rico is a public institution which is accredited by the Middle States Association of Colleges and Secondary Schools. Following the regional accrediting agency's last evaluation in 1975, the University was granted full accreditation. The University of Puerto Rico is also accredited by the Puerto Rico Department of Education, having been granted full accreditation following an evaluation in 1957.

The first class of Level One students was enrolled in August, 1977. The institution is authorized to grant graduates of the dental assisting program a certificate in dental assisting. Students were admitted to Level Two in July, 1978. The institution is authorized to grant graduates of the dental hygiene program an associate degree.

Beginning in the Fall of 1980, all students entering the dental auxiliary program will be required to complete 30 college credit hours prior to enrollment. When this change is initiated, the dental assisting students will be awarded an associate degree upon graduation. It was discussed that the dental hygiene graduates may be eligible for a diploma, which is comparable to the three-year nursing program. The visiting committee expresses concern that the dental hygiene program graduates still be awarded at minimum an associate degree.

COMMUNITY RESOURCES

Advisory Committee: The 1978 visiting committee learned that there was no formal advisory committee to serve as a resource for the auxiliary program. Therefore, it was recommended that an advisory committee be appointed to provide liaison with the local dental and dental assisting/hygiene community. At this time, the institution is in the process of appointing an advisory committee. Invitation letters have been sent to the following associations: the Puerto Rico dental association, the Puerto Rico board of dental examiners, the dental assistants association, the dental hygienists' association, and the school of dentistry. The administration also stated that they have decided to extend an invitation to the department of health for their nomination for a representative on the advisory committee. At the time of this site visit, some organizations had not yet nominated their representatives. The visiting committee wishes to encourage the administration to develop guidelines for the advisory committee to fulfill in carrying out its responsibilities and a plan for appointments which expire on a staggered basis to allow continuity as well as new input.

ADMINISTRATION

The 1978 site visit committee understood that two faculty members, in addition to the chairman of the department of dental auxiliary and the director of the dental auxiliary program, had administrative responsibilities, one for each year of the program. Therefore, it was recommended that the administration clarify the job description for those faculty members involved in program administration and this information be transmitted to those faculty members. The 1979 site visit committee believes that any administrative responsibilities of faculty members are in conjunction with the courses for which they are responsible. For example, clinic supplies are a responsibility of the clinical instructors. Job descriptions have been written and responsibilities defined for the chairman of the department of dental auxiliary and the director of dental auxiliary programs. These responsibilities are adequate for meeting the programs' objectives.

FACILITIES AND EQUIPMENT

The 1978 formal report contained three recommendations related to the programs' facilities and equipment: (1) that additional storage area for instruments and materials be provided and that these storage areas be organized so they are available to all faculty; (2) that a sterilization area be established for all equipment and where students can prepare instruments for sterilization in a more aseptic manner;and (3) that clinical equipment be modified to provide adequate patient positioning throughout all dental hygiene clinical procedures. The first two recommendations have been implemented. Additional storage area has been identified in the basement of the building and the existing storage area is functional and organized. The central sterilization area used for the dental students is now available to the dental auxiliary program. This central sterilization is used both for demonstration and performance of sterilization procedures. There has been no change in objectives or goals for teaching dental auxiliary students asepsis. The sharing of this facility with the dental students has provided adequate service for the auxiliary students and has undergone a very smooth transition.

The recommendation to modify the dental hygiene clinical equipment has not been implemented; however, the administration has identified two approaches to eliminate this problem. The first approach is to modify the equipment with new tubing and handpieces so that the belt driven equipment will not be necessary for polishing. The second solution is to rotate the dental hygiene students to other operatories with newer equipment that are not in continual use by the dental students. The visiting committee believes that either solution would be satisfactory in eliminating the patient positioning problem. The dean of the college of allied health professions made a verbal commitment that the modification of this equipment would be completed by July, 1979, so that the next class of hygiene students would not be disadvantaged. It was also learned from the dean of the dental school that a gradual replacement of approximately 20 chairs each year is underway. Eventually this aging equipment will be replaced. Since, this recommendation has not been implemented, the visiting committee supports its restatement.

1. It is recommended that clinical equipment used by the dental hygiene students be modified to provide adequate patient positioning throughout all dental hygiene clinical procedures.

LEARNING RESOURCES

The 1978 formal report had two recommendations concerning learning resources: (1) that the collection of reference texts for student and faculty use be enlarged and updated; and (2) that faculty make reading and project assignments which will increase utilization of library resources by the dental auxiliary students and thereby increase the level of instruction. The 1979 visiting committee was presented with a list of reference texts that had been ordered for faculty and student use. As these references arrive from the publishing companies, this recommendation will be fully implemented. The visiting committee was presented with a new set of curriculum materials. Many of the instructors have begun to identify reading and project assignments and have reflected these in their course outlines. Although this curriculum has not been implemented yet, the visiting committee believes that the faculty will follow through on the need for students to have skills in using reference materials.

FACULTY

The 1978 formal report recommended that a periodontist have input into the dental hygiene program, both the didactic periodontology instruction and the integration of periodontal principles and advanced instrumentation skills in clinical experiences. The visiting committee was pleased to learn that a periodontist has been identified to work with the dental hygiene faculty. This periodontist has had the opportunity to review the periodontal course outline with the faculty member responsible for teaching that course and has offered his expertise in further developing the course materials. This same periodontist is currently team teaching the seminar for dental hygiene students with the director of the program to help integrate the clinical experiences with scientific periodontal principles. In discussions with the periodontology instructor, it was learned that he has not yet been assigned to instruct in the dental hygiene clinic. The visiting committee encourages the administration to assign the periodontology instructor to the dental hygiene clinic, particularly as more difficult instrumentation skills are being developed. This does not need to be a daily assignment but any increase in coordination between this instructor and clinical instruction would further enhance integration of periodontal principles and clinical skills.

ADMISSIONS

The 1978 formal report contained one recommendation that applies to both programs. It was recommended that the administration define basic admission criteria more clearly, specifically related to chemistry, biology, and bilingual prerequisites. The visiting committee was pleased to learn that beginning with the class which will enter in Fall 1980, the new admissions requirement will include 30 college credit hours which will include: six hours of English, six hours of Spanish, six hours of humanities, and six hours of biological sciences, and six hours of electives. The visiting committee would like to commend the chancellor of the medical center campus for his leadership in making this decision. The university system of Puerto Rico does not allow the first year of college to include specific subjects such as chemistry, sociology, or human anatomy. Until this prerequisite is in effect, it is not feasible for the institution to further define the entrance requirements for the dental auxiliary program. The need for background in chemistry was discussed at length with the administrators, and efforts will increase to select students who have had high school chemistry and biology. In addition, reading comprehension and English skills are evaluated by the College Entrance Examination Board which is utilized as an admission criteria by the University of Puerto Rico. The visiting committee encourages the administration to pursue the possibility of having the prerequisites, particularly electives, replace any of the required courses in the dental auxiliary program through active and effective student counseling.

The 1978 formal report contained recommendations for more specific criteria for entrance to Level Two: (1) that the evaluation of the prospective student include assessment of the theoretical background, scientific principles and clinical skills; (2) that revision of the comprehensive examination test information from Level One that is critical to this entry point of the dental hygiene curriculum; (3) that all necessary remediation and assessment of students be completed prior to enrollment in Level Two; and (4) that the criteria used to select the candidates for Level Two undergo continued assessment. The visiting committee was pleased with the administrators' understanding of the importance of these recommendations. The faculty and administration are identifying how to properly evaluate students entering Level Two who have not been students in Level One of this dental auxiliary program. The comprehensive examination will be under modification in the very near future and the faculty understands that it will again need to be modified as the new curriculum is implemented. The recommendation from the 1978 site visit report that criteria for admission to Level Two be refined to include graduation from a dental assisting program accredited by the Commission on Accreditation has been fully implemented.

CURRICULUM

The curriculum section of the 1978 formal report contained numerous recommendations dealing with specific content in the dental auxiliary program. In addition, it was recommended that the faculty revise course outlines and objectives to reflect the content which is actually presented and the higher levels of learning at which the students are being tested. The materials for this site visit included a fully revised proposed curriculum for both levels and new course outlines and objectives for all courses. The visiting committee would like to commend the administration and faculty for the tremendous amount of effort and dedication that is reflected by this new curriculum. The course outlines and objectives are very well presented and the faculty should be commended for their knowledge of educational methodology. In addition, textbooks have been identified for all courses as well as additional reading materials to enhance the students' understanding of the content.

The visiting committee was pleased with the level of development of the proposed curriculum that has recently undergone revision by the faculty and administration. This curriculum will be initiated with the class entering Fall 1979. The visiting committee encourages the institution to implement as many specific changes in courses and sequence as possible with the Level Two students entering in Fall 1979.

The faculty have also designed a remediation course which includes necessary additional content for the current dental hygiene students prior to their graduation. This remediation will complement the content already presented on microbiology, dental anatomy, anatomy and physiology, pathology and pharmacology. The course is fully developed with objectives and a course outline and will include 24 clock hours of lecture, seminar and class reports. The topics are being presented by the instructors who are responsible for the primary delivery of that subject within the curriculum. All of the content included in the remediation course has been incorporated into the new course outlines of the proposed curriculum. The visiting committee was very impressed with the design and delivery of the remediation seminar.

The new curriculum has been defined to increase the scope, depth and level of many of the subjects included in the original curriculum. In addition, an extra trimester has been added to Level One, Track A so that the total length of time will be three trimesters. The sequence of many subjects has been adjusted to present the material in a more logical order. The first trimester will include courses in microbiology, dental anatomy, radiology, chairside assisting/dental materials/dental procedures, psychology, oral embryology and histology, dental office management/ethics/jurisprudence, and a six-week course in communications.

The microbiology course has been increased in depth and scope to reflect more adequately the principles necessary for the practice of dental hygiene, as recommended in 1978 formal report. In addition, sequencing has been enhanced between microbiology and asepsis technique in the chairside assisting course. The dental anatomy course has been increased in level, depth, and scope to include the principles of occlusion, root morphology, and tooth contours as recommended in the 1978 formal report.

The 1978 report contained two recommendations concerning the radiology instruction: (1) that a record keeping system be developed to aid in providing all students with diversified radiographic experience; and (2) that the dental school's policy be reviewed regarding paients' radiographic exposures. Both of these recommendations will be implemented in the fall of 1979 when the radiology course is taught again.

In the 1978 formal report it was recommended that cardiopulmonary resuscitation instruction be included in the curriculum or all students be required to complete the course presently offered at the local hospital. The visiting committee was pleased to learn that as of the Fall 1979 when the chairside assisting course is repeated, the completion of the CPR course taught at the local hospital will be included as a course requirement.

In addition, the 1978 site visit report recommended that the chairside/ dental materials course include background in the laboratory procedures associated with removable and complete prosthodontics. The visiting committee was pleased to review the proposed course outline for chairside assisting/dental materials which contains this additional content. The revised course will be implemented in the Fall 1979.

The 1978 formal report contained a recommendation that a college level transferable general psychology course be offered in place of or in addition to Psychology of Human Interaction. The visiting committee reviewed the course outline for the proposed psychology course and was pleased that this course will contain many of the broad principles and theories taught in college level general psychology courses.

The 1978 site visit report contained a recommendation that the curriculum be revised to include required content on communication in the English language. The visiting committee was pleased to review the course outline for the six-week communication course that will be taught in Level One and would like to commend the faculty member responsible for developing these materials. The visiting committee discussed the English requirement at length and believes that the prerequisite of six hours of college level English prior to entering the program will eliminate this problem and allow students to have the ability to read English in order to understand their textbooks and library resources.

The second trimester of the first year will include courses in anatomy and physiology, preventive dentistry, chairside clinical rotations 1A and B, a seminar, and, for track B students, expanded functions in restorative and preventive dentistry. The formal report of the 1978 site visit contained a recommendation that content related to the nervous, endocrine, and lymphatic systems be added to the human biology course and that anatomy and physiology be more inclusive to include this content. The visiting committee was pleased with the proposed solution by increasing the scope, depth, and level of anatomy and physiology in the second trimester for the dental auxiliary students so that it would meet the requirements for those students continuing with Level Two.

The third trimester of the first year includes content in head and neck anatomy, pathology and therapeutics, chairside clinical rotation, a seminar and, for students in track B, expanded functions in restorative and preventive dentistry. The 1978 formal report contained several recommendations concerning this content: (1) that general pathology be increased in scope to include neoplasia and oral manifestation of diabetes, leukemia, and vitamin deficiencies; and (2) that content should be added to Level One, Track B concerning therapeutics utilized in the practice of dentistry. The visiting committee was pleased to review the course outline in pathology and therapeutics and to see that the scope, level, and depth have been increased to include this material.

The 1978 site visit report also recommended that the amount of clinical practice for the dental assisting program be increased to approximately 300 hours. Level One, Track B has increased the number of clinical chairside hours so that at the completion of the three trimesters the students have had 336 hours of chairside clinical experience. In the proposed curriculum, 762 hours have been made available as clinical chairside time for the students in Track A. The visiting committee discussed the use of this time with faculty members and were encouraged with the innovative ideas presented including a business module and specialty rotation options. The faculty is encouraged to innovate with the use of these hours and to possibly substitute other courses that would apply toward a baccalaureate degree or reduce the total number of contact hours for the students in the first term of the first year.

In the 1978 formal report, it was recommended that transferability of general education and basic science courses be determined to ensure that they are being taught at an acceptable college level and to provide opportunity for students to work toward a baccalaureate degree in the future. The visiting committee discussed this with the dean and chairman of the department at great length to clarify the situation in Puerto Rico. The University system allows for the decision of transferability to be determined specifically by the dean of the college the student is requesting to enter. Because of this system, there is no standard level of courses that is applicable toward a futher degree. The visiting committee was encouraged by the avenue available to dental auxiliary graduates to continue towards a health education degree, which is within the college of Allied Health Professions. The advent of the year of prerequisites would, at minimum, allow transferability of 30 college credits. In reviewing the course outlines in the proposed curriculum, the visiting committee was pleased to see that the general education and basic science components of the curriculum were designed to be broad in scope and allow as much transferability as the university system would allow. It has been explained that the true test of transferability will be when a student presents his/her transcript to the dean of the school desiring to enter and the dean will make the arbitrary decision as to what exactly is transferable.

Level Two begins with a summer term that will contain sociology and preclinical oral hygiene. The sociology course has been designed to present the broad principles of that social science. The preclinical course has been split into a two-course sequence. The basics of preclinical skills are taught in the summer term and the instrumentation skills for advanced dental hygiene procedures are taught in a course in the fall of the second year titled Advanced Oral Hygiene. The visiting committee wishes to commend the instructor for her innovative design to eliminate the long hours of preclinical instruction in the summer term.

In addition to advanced oral hygiene in the fall term of the second year, instruction also will be given in community dental health; general, organic and inorganic chemistry; periodontics; clinic I; and the clinical seminar. The community dental health course is a consolidation of the original two courses.

In the 1978 formal report it was recommended that the administration reevaluate the sequencing of sociology in relation to the principles of community dental health. In the proposed curriculum this will be implemented. The other sequencing recommendations include: (1) that anatomy and physiology be sequenced before head and neck anatomy; (2) that anatomy and physiology be sequenced before pathology; (3) that microbiology be taught before asepsis; (4) that organic chemistry be taught before pharmacology; and (5) that biochemistry be taught before any nutritional counseling. The new curriculum has resequenced these courses so that introductory content will be taught before the content that requires application of those principles.

The second trimester of Level Two includes courses on biochemistry and nutrition, pharmacology, and clinic with its seminar. The 1978 report stated that the scope of pharmacology should be increased to include the interaction of local anesthetics. This recommendation will be implemented with the proposed pharmacology course. It also was recommended in the 1978 report that oral pathology instruction be increased in depth to relate pathology to clinical services of dental hygiene and differentiation of pathology clinically. The pathology course given in the first year appears to be at an appropriate scope, level, and depth for the dental hygiene students. In addition seminars have been added throughout the clinical sequence to integrate pathology principles with the clinical manifestations.

The final trimester of Level Two consists of clinic and the clinical seminar. This seminar is team taught by the program director and a periodontist allowing for the maximum integration of periodontics and clinical experiences. In the 1978 site visit report it was recommended that a seminar should be added in the first trimester of the second year and coordinated with clinic one. Further it was recommended that seminars III and IV should ensure integration of advanced clinical skills and clinical experiences. The proposed curriculum will implement this recommendation and the changes that have already been implemented in clinic IV reflect the magnitude of these changes.

In the 1978 report, it was recommended that the clinical courses be reevaluated in view of the late entry of clinical experience into the curriculum concerning the following factors: (1) patient procurement and broken appointment problems; (2) reduced clinic time as a result of scheduled restorative expanded functions clinical assignments; and (3) reduced clinical time as a result of scheduled clinical assistant assignments. The administration is currently defining ways of eliminating patient procurement and broken appointment problems. The visiting committee encourages them to continue this pursuit. The assignment of dental hygiene clinic has been discontinued to allow for more time in dental hygiene services. There has been no change in the clinical assistant assignment; however, this is considered by the visiting committee to be insignificant to the amount of time added to the dental hygiene procedures with the other changes. The visiting committee was concerned about the number of completed patients that the dental hygiene students experienced. Avenues were discussed with the clinical instructor to change course requirements to allow students to increase the number of prophylaxes completed.

> 2. It is recommended that the clinical course sequence be revised to increase the total number of prophylaxes completed prior to graduation.

The 1978 report recommended that the faculty should continue to refine the clinical evaluation forms to include instrument sharpness, cavitron usage, as well as clear patient classifications. The visiting committee had the opportunity to review the clinical evaluation forms and was pleased that they have been revised as recommended. The visiting committee was concerned however, that the process criteria used to evaluate the process of clinical procedures was not continued throughout the clinical course sequence.

3. It is recommended that the faculty continue the refinement of the clinical evaluation mechanism to include process evaluation throughout the clinical course sequence.

In 1978 it was recommended that if the faculty:student ratios change, the time allotted for preclinical experiences and clinical sequence be critically examined to ensure that course objectives can be met. The 1979 visiting committee was assured that there are no plans in the near future to change the faculty:student ratio.

The visiting committee wishes to commend the faculty and administration on the tremendous effort they have put forth to address the deficiencies identified by the Commission. The administrators are to be commended for their perseverance in the accreditation process, including the consultation between the program administrators and the Commission staff. The visiting committee is aware that as this curriculum is a proposed one and that as it is implemented, other changes in course and curriculum materials will be needed.

4. It is recommended that the institution submit to the Commission any changes in the curriculum goals or materials as a result of the implementation and revision of the proposed curriculum.

ACCREDITATION STATUS

At its May, 1979 meeting, the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs adopted a resolution to change the accreditation classification of the dental assisting program at Puerto Rico University from "conditional approval" to "approval" and that this change reflect the inclusion of Level One, Track A into the accreditation classification.

At its May, 1979 meeting, the Commission on Accreditation of Dental and Dental Auxiliary Educational Programs adopted a resolution to grant the accreditation status of "conditional approval" to the University of Puerto Rico dental hygiene program. In taking this action the Commission also requested that a progress report on implementation of the recommendations contained in this report be submitted for consideration during the May, 1980 meeting.

Exhibit L

Level I - Track A (Nine Months)

First Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 002	Microbiology	24	-	-	2
PAXD 004	Dental Anatomy	24	-	-	2
PAXD 013	Radiology	24	48	-	4
PAXD 001	Chairside Assisting/Dental Materials/Dental Procedures	72	144	-	12
PAXD 008	Psychology	36	-	-	3
PAXD 009	Oral Embryology and Histology	24	-	-	2
PAXD 003	Dental Office Management/ Ethics/Jurisprudence	24	12	-	2
PAXD 005	Communication	12	-	-	1
	TOTAL	240	204	-	28

Second Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 042	Anatomy and Physiology	36	-	-	3
PAXD 027	Preventive Dentistry	36	-	-	3
PAXD 020	Clinical Rotation 1-A			360	12
PAXD 017	Seminar I	12	-	-	1
	TOTAL	84	-	360	19

Third Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 011	Head and Neck Anatomy	12	-	-	1
PAXD 016	Pathology and Therapeutics	24	-	-	2
PAXD 018	Seminar II	12	-	-	1
PAXD 048	Clinical Rotation II-A	-	-	402	16
	TOTAL	48	-	402	20

LEVEL I - TRACK B
EFDA IN RESTORATIVE AND BASIC PREVENTIVE
NINE MONTHS

First Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 002	Microbiology	24	-	-	2
PAXD 004	Dental Anatomy	24	-	-	2
PAXD 013	Radiology	24	48	-	4
PAXD 001	Chairside Assisting/Dental Materials/Dental Procedures	72	144	-	12
PAXD 008	Psychology	36	-	-	3
PAXD 009	Oral Embryology and Histology	24	-	-	2
PAXD 003	Dental Office Management/Ethics/ Jurisprudence	24	12	-	2
PAXD 005	Communication	12	-	-	1
	TOTAL	240	204	-	28

Second Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 042	Anatomy and Physiology	36	-	-	3
PAXD 027	Preventive Dentistry	36	-	-	3
PAXD 029	Expanded Functions in Restorative	24	36	-	3
PAXD 023	Expanded Functions in Preventive	12	72	-	4
PAXD 047	Clinical Rotation 1-B	-	-	132	5
PAXD 017	Seminar I	12	-	-	1
	TOTAL	120	108	132	19

Third Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 011	Head and Neck Anatomy	12	-	-	1
PAXD 016	Pathology and Therapeutics	24	-	-	2
PAXD 030	Expanded Functions in Restorative Clinic	-	-	120	5
PAXD 021	Clinical Rotation II	-	-	120	5
PAXD 024	Expanded Functions in Preventive Clinic	-	-	72	3
PAXD 018	Seminar II	12	-	-	1
	TOTAL	48	-	312	17

LEVEL II
EFDA IN ADVANCED PREVENTIVE AND PERIODONTICS (EIGHTEEN MONTHS)

Summer Session

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 046	Sociology	48	-	-	4
PAXD 025	Oral Hygiene Pre-Clinical	12	24	-	2
	TOTAL	60	24	-	6

First Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 028	Community Dental Health	48	24	-	5
PAXD 034	Seminar III	12	-	-	1
PAXD 040	General Organic and Inorganic Chemistry	36	-	-	3
PAXD 032	Clinic I	-	-	132	5
PAXD 050	Advanced Oral Hygiene (Pre-clinical)	24	36	-	3
PAXD 045	Periodontics	36	-	-	3
	TOTAL	156	60	132	20

Second Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 033	Biochemistry and Nutrition	36	-	-	3
PAXD 041	Pharmacology	24	-	-	2
PAXD 035	Clinic II	-	-	312	13
PAXD 036	Seminar IV	12	-	-	1
	TOTAL	72	-	312	19

Third Trimester

COURSE NO.	COURSE TITLE	LECTURE	LAB.	CLINIC	CREDIT
PAXD 037	Clinic III	-	-	396	16
PAXD 049	Seminar V	12	-	-	1
	TOTAL	12	-	396	17

01 and 02 Year Curriculum Course Outlines

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS G.P.O. BOX 5067 SAN JUAN, PUERTO RICO 00936 — TEL. 757-962

COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Microbiology
II. Course Number: PAXD 002
III. Credit Hours: 2
IV. Clock Hours: 24
V. Methodology: Lecture, conference, and class reports
VI. Description

Course introduces students to the basic principles of microbiology and sterilization. Emphasis will be placed upon microorganisms as they relate to sterilization procedures.

VII. Objectives

A. General

Familiarize the student with basic principles of microbiology as they relate to pathogens and prevention of disease through proper sterilization procedures.

B. Operational

1. Identify and classify bacteria.
2. Discuss the general microscopic characteristics of bacteria.
3. Explain the different laboratory techniques and procedures utilized to identify bacteria.
4. Analyze the different sterilization procedures and techniques in relation to the microorganisms affected.
5. Appreciate the importance of sound sterilization techniques in a dental practice.
6. Distinguish the different components of normal blood.

7. Discuss the host-parasite relationship.
8. Explain the growth requirements and bacterial metabolism as related to bacterial physiology.
9. Compare hereditary versus acquired immunity.
10. Discuss the immunological basis of allergy.
11. Relate the different microorganisms transmitted from the respiratory track to their related disease.
12. Differentiate among the different types of bacteria and diseases which produce venereal and related infections.
13. Discuss the pathogens transmitted from the intestinal tract and/or urinary tract and their related diseases.
14. Discuss the pathogens transmitted from the soil.
15. Describe the pathogens and diseases transmitted in blood.

VIII. Course Outline and Schedule of Instruction

A. Course Outline

1. Introduction and course overview
2. Introduction to microbiology
    a. definition and description of microbiology
    b. historical background
3. Microbial nomenclature and classification
    a. classification of microorganisms
    b. general microscopic characteristics of bacteria and grouping
        1) bacillus
        2) coccus
        3) spirals
        4) streptococcus, staphylococcus, diplococcus, sarcina
        5) autotrophic, heterotrophic
        6) motility

4. Laboratory techniques for the identification of bacteria
    a. stains and classification by type of staining.
    b. microscopic techniques and equipment
    c. types of culture
5. Effects of physical and chemical agents on microorganisms
    a. inhibition by:
        1) low temperatures
        2) dessication
        3) combinations of dessication and freezing
        4) high osmotic pressures
        5) bacteriostatic chemicals and drugs
    b. removal by:
        1) passing fluids containing bacteria through very fine filters
        2) high speed antrifugation
    c. destruction by:
        1) fire
        2) heat
        3) chemicals
        4) radiation
        5) mechanical
6. Physiology of bacteria
    a. growth requirements
    b. bacterial metabolism
        1) catabolism
        2) anabolism

7. Components of normal blood
    a. plasma
    b. red blood cells
    c. white blood cells
    d. platelets
    e. blood clotting mechanism
    f. blood types
8. Infection: Host-parasite relationship
    a. ecology
    b. symbiosis
    c. parasite
    d. host
    e. infection
        1) dose of infecting organisms
        2) virulence
    f. toxins
        1) endotoxins
        2) exotoxins
9. Principles of immunology
    a. hereditary (non-specific)
        1) species
            a) absolute
            b) relative
        2) race
        3) individual
    b. acquired (specific)
        1) natural

a) active

1) by disease

2) by repeated contact

b) passive

1) placental, congenital

2) calostrium

2) artificial

a) active

b) passive

1) prophylactic

2) therapeutic

10. Allergy

a. immediate or antibody-mediated

b. delayed or cell mediated

11. Pathogenic microorganisms

a. microorganisms transmitted from the respiratory tract

1) bacterial

a) staphylococci

b) streptococci

c) corynebacterium diphtheria

d) mycobacterium tuberculosis

e) mycobacterium leprae

2) viruses

a) smallpox

b) measles

c) chickenpox

d) herpes zoster

e) herpes simplex
f) mumps
g) rabies
h) influenza
i) common cold

b. bacteria causing venereal and related infections
1) lymphogranuloma venereum
2) trepanema pallidum
3) neisseria ganonhea
4) trichomoniasis

c. pathogens transmitted from the intestinal and/or urinary tracts
1) escherichia coli
2) salmonella
3) shigella
4) vibrio cholera
5) brucella
6) leptospirosis
7) enteric virus
8) protozoa
9) clostridium botulinum

d. pathogens from the soil
1) clostridium tetani
2) anthrax
3) histoplasmosis
4) candida albicans

e. pathogens transmitted in blood
1) serum hepatitis
2) malaria
3) typhus

B. Schedule of Instructional Periods

Period	Hours	Topic
1	2	Introduction to the course and goal orientation Microbial nomenclature and classification
2	2	Microbial nomenclature and classification Laboratory techniques for identification of bacteria
3	2	Effects of physical and chemical agents on microorganisms Physiology of bacteria
4	2	Components of normal blood
5	2	Infection: Host-parasite relationship
6	2	Principles of immunology, allergy
7 & 8	4	Microorganisms transmitted from the respiratory tract
9	2	Bacteria causing venereal and related infections
10	2	Pathogens transmitted from the intestinal and/or urinary tracts
11	2	Pathogens from the soil, pathogens transmitted in blood
12	2	Final examination

IX. Evaluation

Eight quizzes totaling 100 points and a final examination totaling 200 points.

X. Pre-requisite course: none

XI. Textbook

Frabisher and Fuerst's, Microbiology in Health and Disease, Saunders 14th edition (English version) 13th edition (Spanish version)

Developed by Dr. Víctor Fernández
February, 1979

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS UPR RCM G.P.O. BOX 5067 SAN JUAN, PUERTO RICO 00936 — TEL. 757-9626

COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Dental Anatomy I (Lecture)
II. Course Number: PAXD 004
III. Credit Hours: 2
IV. Clock Hours: 24 didactic
V. Description:

This course is designed to develop in the student a comprehensive knowledge about tooth anatomy. Basic dental terminology of normal soft and hard structures is emphasized. A basic knowledge of the masticatory system, the morphology and occlusion of teeth and the functional interrelationship is also included.

VI. Objectives:

A. General

Acquire a comprehensive knowledge about tooth nomenclature, and structural form of teeth in relation to their functional alignment in the dental arch, normal structures of the cavity, and basic principles of occlusion

B. Operational

T1 Analize the different normal structures of the oral cavity in relation to location, size, shape, color, texture and consistency.

E1 Recognize in slide projection, normal conditions of structure of the oral cavity such as lips, tongue, papilla , buccal mucosa, gingiva, floor of the mouth, mandible, maxilla, soft and hard palate, uvula, rugae, frenae, salivary glands, mucobuccal folds, mucogingival junction.

T2 Analize tooth nomenclature in order to understand and apply the correct terminology as it relates to the teeth and oral cavity.

T3 Recognize maxillary and mandibular landmarks.

E1 Identify components of the oral cavity: Anatomical landmarks, mandible and maxilla, soft and hard palate, uvula, floor of the mouth, rugae, frenae, salivary glands, mucobucal folds, gingival tissue, lips and cheeks, mucogingival junction.

E2 Identify the type and number of deciduous or permanent teeth, per quadrant, arch and in total.

E3 Identify the type and number of teeth which are anterior or posterior.

E4 Interpret the correct information regarding a given dental formula.

E5 Apply the various numbering systems to identify or name specific tooth and their location.

E6 Identify and describe tooth structures such as enamel, dentin, pulp chamber, root canal, apical foramen, cementum, cemento-enamel function, dentin-enamel function, periodontal ligament and its surroundings.

E7 Point out and define the tooth surfaces and ridges of a posterior and anterior tooth.

E8 Describe anatomical structures such as: cusp, tubercle-cingulum, ridges, fossae, sulcus, grooves, pits, etc.

E9 Define and identify the proper name for thirds of tooth when given a diagram or a description.

E10 Select from a list the correct name for line or point angle when given a diagram or description.

E11 Discuss the general eruption sequence or order for deciduous and permanent teeth.

E12 Identify correctly the three periods of mans dentition and their approximate time interval of existence.

T4 Compare the morphology of each surface of the crown as well as the root of each permanent anterior maxillary tooth.

E1 Identify permanent maxillary anterior teeth according to its anatomical characteristics.

E2 Point out structural entities such as mamelons, grooves, pits, ridges, fossae, lobes, cingula, etc.

E3 Compare the root anatomy of maxillary anterior teeth in relation to number of roots, form and length.

E4 Recognize the relationship between the tooth form and its function.

E5 Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.

T5 Compare the morphology of each surface of the crown as well as the root of each permanent anterior mandibular tooth.

T6 Differentiate between maxilary and mandibular incisors according to distinguishing features of the crown and root, location etc.

E1 Identify permanent mandibular anterior teeth according to its anatomical characteristics.

E2 Describe the morphology of each surface of the crown as well as the root.

E3 Compare the root anatomy of mandibular anterior teeth in relation to number of roots, form, length and contour.

E4 Determine from a slide projection or drawing, whether a given incisor is upper or lower, right or left.

E5 Compare the root anatomy of a maxillary and mandibular incisor in relation to number of roots, form, shape and contour.

E6 Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.

T7 Compare the morphology of each surface of the crown as well as the root of each permanent maxillary premolar.

E1 Differentiate between first and second premolar according to distinguishing features of the crown and root, location occlusal anatomy, function, etc.

E2 Differentiate between maxillary premolar and anterior teeth according to its anatomical characteristics.

E3 Describe the most outstanding anatomical features of each permanent maxillary premolar.

E4 Compare the root anatomy of maxillary permanent premolars in relation to number of roots, form, length, and contour.

E5 Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.

E6 Relate function to tooth morphology.

E7 Determine from a slide projection whether a given maxillary premolar is first or second, right or left.

T8 Compare the morphology of each surface of the crown as well as the root of each permanent mandibular premolar.

T9 Differentiate between maxillary and mandibular premolars according to function, arch position, distinguishing features, etc.

E1 Differentiate between first and second mandibular premolar according to distinguishing features of the crown and root, location, occlusal anatomy, etc.

E2 Compare premolars and incisor teeth in relation to its anatomical characteristics.

E3 Describe the most outstanding features of each mandibular tooth.

E4 Compare the root anatomy of mandibular and maxillary premolars in relation to number of roots form and length.

E5 Discuss the relationship between tooth morphology and how it affects surrounding tissue which support the tooth.

E6 Relate function to tooth morphology.

E7 Determine from a slide projection whether a given mandibular premolar is first or second, right or left.

T10 Compare the morphology of each surface of the crown as well as the root of each permanent maxillary molar.

E1 Differentiate between first, second and third maxillary molar according to distinguishing features of the crown and root, location, occlusal anatomy, etc.

E2 Differentiate between maxillary molars, premolars and anterior teeth according to its anatomical characteristics.

E3 Describe the most outstanding anatomical features of each permanent maxillary molar.

E4 Compare the root anatomy of maxillary permanent molars in relation to number of roots, form and length.

E5 Relate function to tooth morphology.

E6 Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.

E7 Determine from a slide projection whether a given maxillary molar is first, second or third, right or left.

T11 Compare the morphology of each surface of the crown, as well as the root of each permanent mandibular tooth.

E1 Differentiate between first, second and third mandibular permanent molars according to distinguishing features of the crown and root location, occlusal anatomy, etc.

E2 Differentiate between mandibular and maxillary molars, premolars, and incisors according to its anatomical characteristics.

E3 Describe the most outstanding anatomical features of each permanent mandibular molar.

E4 Compare the root anatomy of mandibular permanent molars in relation to number of roots, form, length and contour.

E5 Relate function to tooth morphology.

E6 Discuss the relationship between tooth morphology and how it affects surrounding tissues which support the tooth.

E7 Determine from a slide projection whether a given mandibular molar is first, second, right or left.

T12 Relate the basic components of the masticatory system to mandibulars movement and occlusion.

T13 Relate the functions and morphology of the teeth to the masticatory system.

T14 Relate the tooth positions and the occlusal relations of a standard occluding dentition.

E1 Define the following terms:

a. occlusion
b. mal-occlusion
c. centric occlusion (centric relation)
d. overbite
e. overjet

E2 Name and describe the basic components of the masticatory system.

E3 Classify and explain the most important mandibular movements.

E4 Describe the several functional relations brought about by mandibular movements.

E5 Discuss the rationale for tooth alignment.

E6 Relate teeth anatomical classification to their function in the oral cavity.

E7 Name and define the compensating curvatures of the dental arches.

E8 Relate the compensation, curvatures of individual teeth to masticatory system stability.

E9 Describe occlusal contact and intercusp relation of all the teeth of one arch with those in the opposing arch in centric occlusion.

E10 Describe occlusal contact and intercusp relation of all teeth during the various functional mandibular movements.

T15 Compare primary and permanent dentition in relation to general shape, size, number, color, and outstanding anatomical characteristics.

E1 Point out basic anatomical characteristics of primary dentition.

E2 Differentiate between primary and permanent dentition.

C. Grading Criteria and Evaluation Method

Quizzes after every lecture for a total of 90 points in quizzes. Class participation, 10 points. Quizzes plus class participation 100 points. Minimum mastery level of 70% is required.

Three written examinations: two partial (100 points each) and a final 100 point for a total of 300 points in written tests. Minimum mastery level of 70% is required.

* Student below the minimum mastery level ov 70% should take remedial quiz B after meeting with instructor.

VII. Course Outline and Schedule of Instruction

A. Course Outline

1. Introduction and Course Objectives

2. Normal conditions of oral structures. Size, shape, color, texture and consistency of:
    a. Lips
    b. Tongue - papillae
    c. Buccal mucosa
    d. Gingiva
    e. Floor of the mouth
    f. Mandible, maxilla
    g. Soft and hard palate
    h. Uvula
    i. Rugae
    j. Frenae
    k. Salivary glands
    l. Mucobuccal folds
    m. Mucogingival junction
    n. Papillae
3. Nomenclature
    a. Anatomical landmarks in the oral cavity
        1. Foraminae
        2. Sutures
        3. Maxillary sinuses
        4. Alveolar process
        5. Crown, root, pulp
    b. Primary dentition (deciduous teeth)
        1. Dental formula
        2. Classification - according to location, function
        3. Arch position
        4. Function

    5. Numbering system
    6. Eruption sequence

c. Permanent Teeth

    1. Dental formula
    2. Classification
    3. Arch position
    4. Function
    5. Numbering system
    6. Eruption sequence

d. Crown and rooth

    1. Enamel
    2. Cementum
    3. Cemento-enamel-junction (cervical line)
    4. Dentin
    5. Pulp chamber
    6. Pulp tissue
    7. Pulp cavity and canals
    8. Alveolar bone
    9. Periodontal membrane

e. Surfaces and ridges

    1. Labial surfaces } Facial surfaces
    2. Buccal surfaces }
    3. Lingual surfaces
    4. Occlusal surfaces
    5. Incisal surfaces
    6. Proximal surfaces
    7. Mesial and distal surfaces

f. Other landmarks
   1. Cusp
   2. Tubercle
   3. Cingulum
   4. Ridge
   5. Marginal ridge
   6. Triangular ridge
   7. Transverse ridge
   8. Oblique ridge
   9. Fossa - central, mesial, distal
   10. Sulcus
   11. Developmental groove
   12. Supplemental groove
   13. Pit
   14. Lobe

g. Division into thirds
   1. Coronal portion
   2. Root portion

h. Line angle, point angle
   1. Definition
   2. Anterior teeth
   3. Posterior teeth

i. General eruption sequence
   1. Primary teeth
   2. Permanent teeth
   3. Periods of man dentition

4. Permanent anterior maxillary teeth
    a. General anatomical characteristics
    b. Structural entities of:
        1. crown
        2. Root
    c. Root anatomy
    d. Tooth morphology and its application
    e. Function
5. Permanent Anterior Mandibular Teeth
    a. General anatomical characteristics
    b. Structural entities of:
        1. Crown
        2. Root
    c. Root anatomy
    d. Tooth morphology and its application
    e. Function
    f. Comparison between maxillary and mandibular incisors
6. Permanent maxillary premolars
    a. General anatomical characteristics
    b. Structural entities of:
        1. Crown
        2. Roots
    c. Root anatomy
    d. Tooth morphology and its application
    e. Function
    f. Maxillary premolar and incisor teeth - a comparison

7. Permanent mandibular premolars
    a. General anatomical characteristics
    b. Structural entities of:
        1. Crown
        2. Root

B. Schedule of Instructional Periods

Period	Hours	Topic
1	2	Course Overview Normal Conditions of the Oral Cavity
2	2	Quiz #1 Nomenclature
3		Continuation of Nomenclature
4	2	Quiz #2 Permanent anterior maxillary teeth
5	2	Permanent anterior mandibular teeth
6	2	First partial examination Permanent maxillary premolars
7	2	Permanent mandibular premolars
8	2	Second partial examination Permanent maxillary molars Permanent mandibular molars
9	2	Quiz #3 Principles of occlusion
10	2	Continuation Principles of occlusion
11	2	Quiz #4 Primary Dentition; Comparison between primary and permanent dentition
12	2	Final Exam

- c. Root anatomy
- d. Tooth morphology and its application
- e. Function
- f. Maxillary mandibular premolars, and incisor teeth a comparison

8. Permanent maxillary molars
   - a. General anatomical characteristics
   - b. Structural entities of:
     1. Crown
     2. Root
   - c. Root anatomy
   - d. Tooth morphology and its application
   - e. Function
9. Permanent mandibular molars
   - a. General anatomical characteristics
   - b. Structural entities of:
     1. Crown
     2. Root
   - c. Root Anatomy
   - d. Tooth morphology and its application
   - e. Function
   - f. Mandibular and maxillary molars - a comparison
   - g. Molars, premolars, incisor - a comparison
10. Principles of Occlusion
    - a. Definitions:
      1. Occlusion
      2. Mal-occlusion

3. Centric occlusion (centric relation)
4. "Overbite"
5. "Overjet"

b. Basic components of the masticatory system:

1. Maxillae
2. Mandible
3. Teeth
4. Muscles - masseter, temporal, external and internal pterygoid
5. T.M.J.

c. Mandibular movements

1. Depression
2. Elevation
3. Protression
4. Retraction

Bilaterally symetrical

5. Lateral movements - right, left   bilaterally asymetrical

d. Functional relations brought about by mandibular movements

1. Centric occlusal relation
2. Protrussive occlusal relation
3. Retrusive occlusal relation
4. Right lateral occlusal relation
5. Left lateral occlusal relation

e. Rationale for tooth alignment

1. Mandibular movement with teeth in contact

2. Avoid clashing of points and edges during teeth contact.
3. During closing and opening movements, cheeks, lips and tongue are less likely to be clipped.
4. Protection of gingival papillae and soft tissue.
5. Dental arch is stabilized

f. Tooth classification and function
    1. Incisor
    2. Canines
    3. Premolars
    4. Molars

g. Compensating Curves of the Dental Arches
    1. Curve of Spee
    2. Monson's curve

h. Compensating Curvatures of Individual tooth and masticatory system stability.
    1. Axial curvature of individual tooth and line of force

I. Occlusal contact and Intercusp relations
    1. Buccal aspect
    2. Lingual aspect

11. Primary Dentition - comparison between primary and permanent dentition

a. Characteristics of Primary Dentition
    1. Enamel
    2. Dentin
    3. Pulp
    4. Roots
    5. Pulp chamber, canals

b. Comparison between Primary and Permanent dentitions

VIII. Teaching Method

Lectures by instructor, supplemented by slide projections, class discussion.

IX. Media

Written lectures, diagrams, drawings

X. Textbook

Fuller, J., Denech, G. Concise Dental Anatomy and Morphology.

XI. References

1. Wheeler - Dental Anatomy and Physiology, latest edition.
2. Wheeler - An atlas of Tooth form, latest edition

* Student will be responsible for visiting the library and reading the assignments pertaining to each topic discussed in class.

Developed by: Dr. Angel R. Aja
February/1979

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IVERSITY OF PUERTO RICO, MEDICAL SCIENCES CAMPUS G.P.O. BOX 5067 SAN JUAN, PUERTO RICO 00936–TEL. 767-9626

COLLEGE OF HEALTH RELATED PROFESSIONS
DENTAL AUXILIARY DEPARTMENT

I. Course Number : PAXD 008 PSYCHOLOGY OF HUMAN INTERACTION

II. Credit Hours : 3

III. Clock Hours : 36

IV. Description

This is an introductory course to psychology which views it as the science of human behavior. The course is designed to satisfy both the needs of the students and the needs of a basic course of psychology. It views the human being individually and as part of a group.

V. Objectives

A. General

1. Five students a general, integrated and exact view of the development of Psychology.

2. Help students gain insight into some concepts of Psychology that will help them in dealing with people, specially in their work setting.

3. Help students apply the knowledge they acquire in the course to specific situations of life.

B. Operational

During the course the student will:

1. Make a clear distinction between the determinist and the non-determist model and recognize the implications of each one.

2. Explain the development of psychology from its origin to the present.

3. Evaluate the importance of inheritance, maturation and culture in the development of the person.

4. Identify sources of variability within a culture.

5. Recognize conditioning as a learning experience.

6. Identify and describe the elements of conditioning.

7. Differentiate between classic and operant conditioning.

8. Define and recognize different types of motives.

9. Acquire knowledge of the factors that affect the strength of the motives.

10. Recognize the importance of problem solving and identify the factors that influence the process.

11. Define and explain methods of identifying and evaluating characteristics of personality.

12. Evaluate the utility of identifying characteristics of personality

13. Define the terms frustration and defense mechanisms and explain its interrelation.

14. Recognize each type of defense mechanism with an example.

15. Identify and differentiate between the various psychologic disorders.

16. Evaluate the effect of social perception in human actions.

17. Evaluate the importance of interpersonal relations.

18. Define attitude and recognize forms of measuring them.

19. Explain strategies for changing attitudes.

20. Learn and critisize assigned readings.

VI. Course Outline

I. Origins and definitions of Psychology
  a. visions and models in Psychology
  b. psychology as the science of human behavior.

II. Behavioral Antecedents
  a. cultural antecedents
  b. inheritance and maturation

III. Behavioral Determinants
  a. learning
  b. motivation
  c. problem solving

IV. The person
  a. characteristics of personality
  b. frustation and defense mechanisms
  c. psychological disorders

V. Social Psychology
  a. interpersonal relations
  b. the person and society

VII. Schedule of Instructional Periods

Session	Hours	Topic
1	1 1/2	Visions and Models in Psychology
2	1 1/2	What is Psychology?
3,4	3	Cultural Antecedents of Behavior
5,6	3	Inheritance and Maturation
7,8	3	Introduction to Learning
9,10	3	Motivation
11,12	3	Problem solving
13,14	3	Frustation and defense mechanisms
15,16	3	Characteristics of Personality and its Evaluation
17,18	3	Psychological Disorders
19,20	3	Interpersonal Relations
21,22	3	The Person and Society

VIII. Evaluation

1st test - 20%
2nd test - 20%
Final - 30%

3 readings 30% (10% each one)

100%

·Reading Analyses:

Students will be given 3 readings throughout the course and they will analyze, critisize them and give back a written analyses of each one of them.

IX. Teaching Methods

Conferences, comprehensive questions and oral reports of personal experiences.

X. Media

Text, additional readings.

XI. Textbook

McKeachie and Doyle "Psicología", Fondo Educativo Interamericano, SA., 1973

XII. References

Aronson, E., "The Social Animal"

Di Caprio, N., "Teorías de la Personalidad"

McKeachie and Doyle "Psicología"

Skinner, B.F. "Más allá de la Libertad y la Dignidad"

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Developed by Claudia Schrrer

August, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Dental Radiology
II. Number: PAXD 013
III. Credit hours: 4
IV. Clock Hours: 72
V. Methodology: Lecture/lab.
VI. Course Description:

Course will introduce students to the principles and procedures necessary for exposing, processing, mounting, and interpreting of intraoral radiographs. Emphasis will be placed on the development of technical accuracy and professional judgment.

VII. Objectives:

A. General

1. To motivate the students to acquire the skill to become proficient in producing diagnostic dental radiographs.
2. To provide an understanding of the principles of radiation.
3. To provide the dental auxiliary student with the knowledge and skill to properly operate the dental x-ray unit.
4. To encourage dental auxiliary students to acquire the skill of producing diagnostic dental radiographs.
5. Utilize and apply knowledge from related basic sciences to the interpretation of radiographs.

B. Operational

At the end of this course the student will:

1. apply the basic principles of radiology when exposing dental films.
2. protect her patient and herself by utilizing all safety measures available.

3. protect her patient and herself by utilizing correct positioning of patient film and X-ray machine when taking dental radiographs using the bisecting or paralleling technique.
4. identify on a written exam the components of an X-ray tube.
5. explain on a written exam the contra-indications for taking X-rays on a patient who is pregnant.
6. differentiate between "filtration" and "collimation" on a written exam.
7. explain the term "total filtration" on a written exam.
8. discuss on a written exam the terms "kilo voltage" and "milliamperage" and how it affects the exposure of dental radiographs.
9. demonstrate darkroom procedures, utilizing care in the processing of dental films by maintaining correct water temperature and fixing time.
10. recognize the median palatine suture and the anterior palatine foramen on an upper anterior dental radiograph.
11. recognize the nasal septum and the nasal cavity on a dental radiograph.
12. identify on separate radiographs the maxillary sinus and the area in which it is normally located.
13. locate the maxillary tuberosity, the coronoid process and the hamular process on an upper posterior radiograph.
14. identify the mental foramen and the mandibular dental canal on given lower posterior radiographs.
15. state on a written exam the five most common errors which occur due to inadequate exposing techniques and how to correct them.
16. state on a written exam six radiographic errors which occur due to inadequate processing technique.

VII. Course Outline and Schedule of Instructional Periods

Period	Hours	Topics	Hours	Laboratory
1	2	Course description, outline and requirements Origin and Behavior of X-rays Hazards of Radiation Primary and Secondary	4	Introduction to x-ray equipment
2	2	Quiz - A X-ray equipment: X-ray unit: Components, regulation devices X-ray production Collimation and Filtration	4	Demonstration of protective measures
3	2	Quiz A Radiographic Techniques Bisecting Angle Paralleling technique	4	Technique demonstration on manikin
4	2	Quiz A Radiation: Dental Films: Intra-oral Extra-oral Protective measures	4	Darkroom demonstration technique Technique practice on manikin a. long cone b. short cone interchange groups
5	2	Quiz A Darkroom and Processing Procedures, Identification of Inadequacies in Radiographs	4	Practice Mounting and technique Practice a. long cone b. short cone
6	2	Quiz A Anatomical Landmarks Mounting: full series, bite wings	4	Practice Mounting and technique Practice a. long cone b. short cone
7	2	Quiz - A Radiographic Interpretation: Normal Structures Abnormal Structures	4	Technique demonstration and practice on manikin and partner
8	2	Quiz A Occlusal survey: Intra-oral Extra-oral Bitewing, Lateral plates, Panorex, cephalometric	4	Darkroom practice, Technique practice on manikin

Period	Hours	Topics	Hours	Laboratory
9	2	Quiz - A Factors influencing finished radiographs collimation and filtration Processing of radiographs Regulating devices	4	Technique practice on manikin and partner
10	2	Quiz - A Dealing with Radiology Patients	4	Technique practice on manikin & partner
11	2	Final (didactic)	4	Technique practice on manikin & partner
12	2	Final (practical) Written examination of radiographic surveys taken on partner Identification of most common errors that occur during exposing and processing radiographs.	4	Technique practice on manikin

IX. Teaching methods:

1. lectures
2. demonstrations
3. practice

X. Media:

1. slides
2. overhead
3. laboratory manikin
4. programmed instruction as assigned

XI. Evaluation:

75% minimum mastery level required in didactic and laboratory

10 - 15 minute quizzes
1 - 2 hour final exam

Percentage Grade on a Quiz (A)	Points
95 - 100%	10 pts.
85 - 94	9 pts.
75 - 84	8 pts.
00 - 74	--

Percentage Grade on Make-up Quiz (A)	Points
95 - 100%	8 pts.
85 - 94	7 pts.
75 - 84	6 pts.
00 - 74	--

Percentage Grade on Final	Points
93 - 100%	20 pts.
86 - 92	15 pts.
81 - 85	12 pts.
75 - 80	10 pts.
00 - 74	--

If 75% mastery is not shown on the make-up quiz, a verbal examination will be given with a maximum of 3 assigned points if 75% mastery is shown at that time.

Make-up opportunity for the final exam will be based on the individual deficiencies demonstrated in the exam and in no case shall a make-up exam be worth more than five points.

XII. Requirements: (laboratory)

One full series of x-rays with not more than four (5) individual retakes allowed in each serie. 100 points.

Given one full series of x-rays incorrectly taken and submitted with a written report identifying the inadequacy in the film and how to correct it. 100 points.

A practical exam consisting of 10 radiographs will include upper and lower molars, upper and lower bicuspids, upper and lower cuspids, upper and lower centrals, molar and bicuspid bite wings.

The finished radiographs will be evaluated according to the criteria on the evaluation sheet. Total 100 points.

Course grades will be assigned according to the following course point tallies:

Didactic	Weight	Laboratory	Weight
115 - 120 points	A 50%	95 - 100 points	A 50%
106 - 114 "	B	85 - 94 "	B
90 - 105 "	C	75 - 84 "	C

XIII. Textbook:

Required: O'Brien, R. C. Dental Radiographic
Philadelphia, Saunders, 1972. p. 218

XIV. References

X-Rays in Dentistry, Eastman Kodak Co., 1972
Current literature including journal articles

Revised by Mrs. Nilda McCormick
February, 1979

Each complete radiographic survey will be scored according to the following criteria:

I. Each periapical film in the mount will receive +5 points if acceptable and correctly mounted.

   A. Deduct one (1) point for each of the following errors (each film)

      1. incorrect packet placement
      2. incorrect horizontal angulation (severe; -1/2 if slight)
      3. incorrect vertical angulation (severe; -1/2 if slight)
      4. missed apices
      5. cone cut (-1/2 if minor)

   B. Deduct one-half (1/2) point for the following:

      1. incorrect density of film
      2. processing errors
      3. mounting error

   C. Deduct 5 points

      1. film backward
      2. totally unacceptable film

II. Interproximal surveys (bitewings) - each correct film will receive +5 points.

   A. Deduct one point for the following:

      1. unequal distribution of maxillary and mandibular teeth
      2. incorrect ant-post packet placement

   B. Deduct three points for:

      1. excessive horizontal overlap
      2. distortion of crowns of teeth (magnification and/or elongation)

   C. Deduct 1/2 point for items listed in B above.

III. Total points available for all films in the CMRS is 90; to this will be added from 0-10 points based on the overall esthetic appearance of the series.

Failure to use the lead apron on the patient will result in a grade of F for any full series.

RADIOGRAHIC EVALUATION

STUDENT NAME______________________________

PATIENT NAME______________________________

	Max.R. 2nd Mol.	Max.R. Premol.	Max.R. Canine	Max. Cent.	Max.L. Canine	Max.L. Premol.	Max.L. 2nd Mol.	Mand.R. 2nd Mol.	Mand.R. Premol.	Mand R. Canine	Mand. R. Central	Mand.L. Canine	Mand.L. Premol.	Mand. 2nd Mo
Packet correctly placed														
Vertical angulation-elongation														
Vertical angulation-foreshortened														
Horizontal angulation-overlapped interproximals														
1/4"or more bone beyond each apex														
Acceptable density														
Cone cut														
Processing error														
Retake necessary														

	R. Molar Bitewing	R. Premolar Bitewing	L. Premolar Bitewing	L. Molar Bitewing
Interproximal spaces superimposed				
Equal distribution of maxillary and mandibular arches				
Crowns of teeth are magnified or distorted				
Retake necessary				
Packet correctly placed				

Make each box with

Y for yes
N for no
? if you have doubt

Criteria to be used as a basis for the written or visual evaluation of each film in your CMRS should include the following:

1. The radiograph should be an acceptable representation of the area being radiographed.
2. The image of the teeth should neither be foreshortened or elongated.
3. The interproximal spaces should not be overlapped.
4. There should be at least 1/4 inch of alveolar bone visible beyond the apex of each tooth (if it has more than 1/4", it is also acceptable).
5. There should be a 1/8 - 1/4 inch margin between the crowns of the teeth and the edge of the film.
6. The density of the radiograph should be acceptable - neither too dark or too light.
7. There should be no cone cuts.
8. The embossed dot should be at the incisal or occlusal surface on periapical films.
9. In any CMRS, the apex of each tooth should be visible at least once and preferably twice.
10. The films should be free of processing and handling errors (scratches, finger prints, chemical stains, and other artifacts).

For interproximal surveys (bitewings)

1. The interproximal spaces should not be superimposed from the distal of the mandibular cuspid to the distal of the 3rd molar.
2. There should be an equal distribution of both maxillary and mandibular teeth on the film.
3. The interproximal bone at the crest of the alveolar process should be visible without superimposition of the crowns of adjacent teeth.
4. The occlusal plane should be straight or slightly curved up in the distal.
5. The crowns of the teeth should not be magnified, enlarged, or distorted.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title : Oral Embryology and Histology
II. Course Number : PAXD 009
III. Clock Hours : 24
IV. Credit Hours : 2
V. Description :

An introductory study of the primary oral tissues. Emphasis is placed on the study of the microscopic anatomy of the tissues of the mouth and the embryonic development of the face and the oral cavity structures.

V. Objectives:

A. General

Review basic concepts of the morphology and functions of the primary oral tissues, and familiarize the students with the development and histology of the face and oral cavity.

B. Operational

T1 Analize the relationship between classification, composition and function of body tissues.

E1 Define a tissue

E2 Name the components of a tissue

E3 Describe the function of each component in a tissue.

E4 Name four (4) basic types of tissue and the classification of each type.

T2 Compare type and function of each body tissue.

E1 Define epithelial tissue.

E2 Describe the various kinds of epithelial tissue according to function and type of cell.

E3 Name the functions of epithelial tissue.

E4 Define connective tissue.

E5 Enumerate type of connective tissue.

E6 Name four functions of connective tissue.

E7 Relate types of connective tissue fibers to function of connective tissue.

E8 Define nerve tissue.

E9 Differentiate between the three types of muscle tissue.

T3 Explain Basic Concepts in the process of human reproduction.

E1 Define ovum and spermatozoon

E2 Describe the process of fertilization

E3 Define zygote

E4 Describe characteristics of the zygote.

E5 Describe the different structures formed during the process of division of the zygote.

E6 Name the three germ layer.

E7 Describe the functions of the three germ layers.

T 4. Discuss the embryological development of the face palate and tongue from the branchial arches and frontal process.

- E1. Define stomodeum
- E2. Describe the formation of the stomodeum
- E3. Define buccopharingeal membrane
- E4. Explain the formation of the buccopharingeal membra
- E5. Define frontal process
- E6. Enumerate the structures arising from the frontal process.
- E7. Name the branchial arches
- E8. List the structures arising from the branchial arch
- E9. Define olfactory pit
- E10. Describe the process involved in the embryonic development of the nose, lip and premaxilla.
- E11. Enumerate the steps in the development of the palate, nasal septum and tongue.

T 5 Explain the embriological development of tooth structures by describing the different formation periods.

- E 1. Define dental lamina.
- E 2. Describe the function of the dental lamina.
- E 3. Define enamel organ and tooth germ.
- E 4. Enumerate the three (3) parts of the tooth germ.
- E 5. Point out the structures arising from each part of the tooth germ.
- E 6. Describe the differents stages or period of formatio in tooth development.
- E 7. Describe the composition and role of the outer ename epithelium, stellate reticulum, stratum intermedium, inner enamel epithelium.
- E 8. Describe enamel formation.
- E 9. Describe root formation.
- E 10. Describe dentin formation.
- E 11. Describe Periodontal ligament and cementum formation

T6 Differentiate the macroscopic and microscopic structure of enamel and dentine by describing their structural components.

T7 Compare enamel and dentine in relation to composition, location, consistency, age of individual, thickness, and formation.

- E1 Describe enamel composition.
- E2 Relate the microscopic structure of enamel to physical properties and characteristics.
- E3 Define perikymata and mamelons
- E4 Identify in slide projections perikymata and mamelons.
- E5 Define bands of Hunter Schreger and stripes of Retzius.
- E6 Identify in slide projections Bands of Hunter Schreger and stripes of Retzius.
- E7 Define lamallae, tufts and spindles.
- E8 Identify in slide projections lamallae, tufts and spindle.
- E9 Discuss the relationship between enamel structure and caries suceptibility.
- E10 Describe dentin composition.
- E11 Define the five (5) types of dentin that exists.

E12 Point out in slide projections the different structural elements of dentin: tubules, deadtract, Tomels granular layer, etc.

T8 Differentiate the macroscopic and microscopic structure of cementum from that of enamel, dentin and pulp.

E1 Locate and describe cementum composition.

E2 Name the structural elements of the cementum.

E3 Name the two (2) types and distribution of cementum.

E4 Describe the varieties of junctions that can be found between the enamel and cementum.

E5 Name the functions of cementum.

E6 Describe the clinical importance of cementum.

E7 Define and identify in slide projections cementocytes and cementoblast.

E8 Describe tooth pulp location

E9 Name the structural components of the dental pulp

E10 Describe tooth pulp composition

E11 Name the types of cells found in a normal dental pulp

E12 Describe the function of each cell in the dental pulp

E13 Point out the function of the dental pulp

E14 Differentiate hystologically between the dental pulp of a young and old tooth

E15 Differentiate between pulp, cementum, enamel and dentin.

E16 Describe the clinical importance of the pulp and cementum.

T9 Differentiate the structural components of the periodontium and alveolar process.

T10 Compare the histological components and development of the periodontium and alveolar process with other entities of mesodermal origin.

T11 Analyze the histology of the periodontal ligament in the following situations and relate it to clinical considerations:
a. mesial drift
b. occlusal trauma
c. loss of function

E1 Describe periodontal ligament location

E2 Discuss the development of the periodontal ligament

E3 Define and identify on the overhead projector the structural components of the periodontal ligament.

E4 Define Sharpey's and principal fibers

E5 Name and locate the principal fibers of the normal periodontal ligament and relate their histological arrangement to function

E6 Differentiate the periodontal ligament histology of a functioning and non-functioning tooth.

E7 Define alveolar process

E8 Differentiate the structural components of the alveolar process

E9 Point out the factors influencing bone apposition and resorption.

T12 Compare the histological composition of the oral mucosa with that of the gingiva.

T13 Compare the histological structures of the mucous membranes in the different areas of the oral cavity and relate it to function of specific zones.

T14 Differentiate the histologic structure and development of the gingiva in different areas of the oral cavity.

E1 Describe and identify on a diagramatic drawing general characteristics of oral mucous membranes

E2 Differentiate between oral mucous membranes and the mucous membranes of other parts of the body.

E3 Compare the histology of the oral mucosa in different parts of the oral cavity.

E4 State the three categories of oral mucosa, their location and function.

E5 Diffentiate histologically between the three types of oral mucosa.

E6 Describe the subdivision of the gingiva, including location and clinical appearance.

E7 Describe the four types of gingival epithelium according to the surface layer.

T15 Differentiate the four types of movement of teeth during the process of eruption.

T16 Analyze the histology of tooth eruption and relate it to clinical considerations

E1 Define tooth eruption

E2 Name the types of movements the teeth show in the process of eruption

E3 Describe the mechanism of tooth eruption

C. Evaluation Method and Grading Criteria

Five (5) quizzes, 20 points each that sum up to 100 points, two (2) written examinations one at midterm and one at the end of the course (100 points each) for a total of 300 points in written tests. Minimum mastery level of 70% is required.

VI. Course outline and schedule of instruction

A. Course Outline

1. Course Overview

a. Introduction to Oral Embryology and Histology

2. Concepts of General Histology

a. Body tissues

1) Definition

2) Components

3) Classification

4) Characteristics and function of each type, a comparison.

3. Growth and Development of the human face

a. Basic concepts in the process of human reproduction.

1) Ovum and spermatozoon

2) Fertilization

3) Zygote

4) Characteristic of the zygote

5) Structures formed during zygote division

6) Germ layers and their function

b. Development of the facial and oral structures
   1) Development of stomodeum and bucco-pharingeal membrane.
   2) Frontal process
   3) Structures arising from the frontal process
   4) Branchial arches
   5) Structures arising from the branchial arches
   6) Olfactory pits
   7) Development of the nose, lip and premaxilla
   8) Step in the development of palate, nasal septum and tongue.

4. Development of the teeth
   a. Dental lamina
   b. Function of the dental lamina
   c. Enamel organ and tooth germ
   d. Parts of the tooth germ
   e. Structures arising from each part of the tooth germ
   f. Periods of formation in tooth development
   g. Outer enamel epithelium
   h. Stellate reticulum
   i. Stratum intermedium
   j. Inner enamel epthelium
   k. Enamel, dentin and root formation

5. Histology of Enamel and Dentin
    a. Enamel composition and structures
    b. Physical properties and characteristics of enamel
    c. Clinical importance of the structure of enamel
    d. Bands of Hunter Schreger and stripes of Retzius
    e. Lamallae, tufts and spindles
    f. Dentin composition and structural elements
    g. Modified types of dentin
    h. Clinical importance of the structure of dentin
    i. Enamel and dentin; a comparison
6. Histology of Dental Cementum and Pulp
    a. Cementum
        1) Composition
        2) Location
        3) Structural elements
        4) Types and distribution of cementum
        5) Functions between enamel and cementum
        6) Functions
        7) Clinical importance
    b. Dental pulp
        1) Composition
        2) Location
        3) Structural elements
        4) Type of cells

5) Function

6) Clinical importance

7) Pulp, dentin, enamel; a comparison

7. Periodontal Ligament and Alveolar Process

a. Periodontal ligament

1) Location

2) Structural components

3) Embriological development

4) Histological arrangement of principal fibers

5) Clinical considerations: functioning and non-functioning teeth, mesial drifts, occlusal trauma.

6) Comparison between periodontal ligament and enamel, pulp, dentin and cementum.

b. Alveolar process

1) Structural components

2) Factors influencing bone apposition and resorption

3) Clinical consideration

4) Comparison with other entities

8. Oral Mucous Membranes and Gingiva

a. Mucous Membranes

1) Definition and general characteristics
2) Comparison with mucous membranes of other parts of the body
3) Histology of the oral mucosa in different areas of the oral cavity.
4) Categories, location and functions
5) Types
6) Clinical considerations

9. Tooth Eruption
   a. Definition
   b. Types of movement
   c. Mechanism of tooth eruption

B. Schedule of Instructional Periods

Period	Hours	Topic
I	2	Course overview, concepts of General Histology
		Quiz #1
II	2	Growth and Development of the Human Face
III	2	Growth and Development of the Human Face
		Quiz #2
IV	2	Development of the teeth
V	2	Development of the teeth

Period	Hours	Topic
VI	2	Midterm Exam
VII	2	Histology of Enamel and Dentin
		Quiz #3
VIII	2	Histology of Dental Cementum and Pulp
		Quiz #4
IX	2	Periodontal ligament and Alveolar Process
		Quiz #5
X	2	Oral Mucosa and Gingiva
XI	2	Tooth Eruption
XII	2	Final Exam

VII.

VII. Teaching Methods

Lectures, supplemented with visual aids. Class discussion.

VIII. Media:

Handouts, diagrams, drawings, overhead projector.

IX. Textbook:

Orban's Oral Histology and Embryology, latest edition.

X. References:

1. D. Permar, Oral Embryology and Microscopic Anatomy, Lea & Febiger, 4th edition.
2. H.O. Torres and A. Ehlich, Modern Dental Assisting, latest edition.

* The student will be responsible for visiting the library and reading the assignments pertaining to each topic discussed in class.

Developed by: Dr. Angel R. Aja
February/1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

Program: Dental Auxiliary Program

Course Title: Chairside Assisting, Dental Materials and Dental Procedures

Course Number: PAXD001

Credit Hours: 12

Clock Hours: 72 lecture 156 laboratory

Methodology: Lecture/Laboratory

Course Description:

This course consists of classroom and laboratory experiences to capacitate the dental auxiliary in modern chairside assisting, chairside support procedures, dental materials and dental procedures utilized in the various areas of dental practice. Emphasis will be placed on laboratory practice of chairside assisting in dental procedures and on the biological considerations, effects of cooling agents and common reason for failure of each dental material.

Objectives:

A. General

Acquire knowledge of basic dental equipment and its maintenance. Develop skills relative to patient and dental auxiliary positioning, instrument transfer techniques, tray set-up preparation for specific dental treatment procedures; and the manipulation of the dental materials used in these procedures.

B. Operational

At the end of this course the student will:

1. apply the concepts of time and motion to the chairside procedures of four-handed dentistry.
2. apply principles of body measures which will reduce fatigue and maintain stamina for prolonged periods of peak efficiency.
3. discuss in class the correct manipulation of basic dental office equipment and instruments.
4. describe on a written exam the proper maintenance of basic dental office equipment and instruments.
5. demonstrate ability to sharpen instruments for the conservation and preservation of the cutting edges.
6. relate the concept of prevention to the rationale for asepsis.
7. describe on a written exam the difference between the terms sterilization, disinfection and sanitation.
8. identify on a written exam a method utilized for sterilization purposes, for disinfection purposes and for sanitation purposes.
9. demonstrate in laboratory, the use of the autoclave and iriclave for sterilization purposes.
10. demonstrate in laboratory the use of zephrin chloride for disinfection purposes and alcohol wipes for sanitation purposes.
11. demonstrate in a role playing situation how to greet, escort seat and dismiss a dental patient.
12. position patient and self for maximum efficiency.
13. utilize principles of four-handed dentistry as a member of the dental health team.
14. demonstrate ability to establish patient rapport in a role-playing situation.
15. demonstrate ability to obtain a patients medical and dental history utilizing the Questionnaire Method.

16. take the blood pressure, pulse and respiration rate on a laboratory partner.

17. demonstrate ability to correctly chart dental conditions as designated by the instructor.
    a. utilizing continuous numbering system for primary and permanent dentition.
    b. utilizing Quadrant Numbering system for primary and permanent dentition.
    c. utilizing a list of charting symbols.

18. demonstrate ability to record the findings in an oral cancer inspection as dictated by the instructor.

19. demonstrate knowledge of dental and medical emergency procedures that most commonly occur in the dental office

20. demonstrate the technique for extern compression of the heart

21. apply the C.P.R. techniques on Resusity Ann.

22. value the importance of resucitation technique.

23. recognize the characteristics of the unconscious patient in 4 to 10 seconds.

24. locate and operate emergency equipment.

25. given a set of procedure sheets, containing a list of instruments and materials in the order of use, the student will:
    a. correctly set-up for clinical examination
    b. correctly set-up for administering anesthesic
    c. correctly set-up for rubber dam procedures
    d. correctly set-up for amalgam procedures
    e. correctly set-up for composite procedures
    f. correctly set-up for pulp capping procedures
    g. correctly set-up for dental cementation procedures

h. correctly set-up for pulpotomy procedures

i. correctly set-up for Stainless Steel Crown procedures

j. correctly set-up for Crown and Bridge procedures

k. correctly set-up for Surgical procedures

l. correctly set-up for Prophylaxis procedures

m. correctly set-up for Periodontal procedures

n. correctly set-up for Endodontic procedures

o. correctly set-up for Orthodontic procedures

p. correctly set-up for Prosthodontic procedures

26. enumerate the uses of the explorer and mirror.

27. recognize his/her role in each dental procedure or specialty.

28. recognize the instruments used for each dental procedure.

29. identify the dental materials for specific dental procedures.

30. identify the physical properties of the materials to be used in the individual procedures.

31. describe the biological considerations associated with the dental materials and procedures discussed.

32. manipulate correctly the materials and instruments for each procedure.

33. select the proper clamps to be used in procedures that require the use of rubber dam.

34. pour and trim study casts.

35. clean and polish removable appliances.

36. fabricate custom trays for impressions.

37. identify the correct consistency and texture of the materials for the following procedures: cementation, temporary restoration,

and thermal insulator (base).

38. clean and polish a partial denture in lab. utilizing the ultrasonic cleaner and motor lathe.

39. differentiate between local and general anesthesia in relation to types, dosage, instrumentation and complication.

40. relate medical history vasoconstruction in local anesthesia and choice local anesthetic.

41. discuss the role of Dental Auxiliary in different restorative procedures.

42. describe the indications and contraindications for the application of rubber dam.

43. describe the procedure for punching the rubber dam.

44. classify cavity preparation according to localization, surface, number, type and G.B. Black Classification.

45. enumerate and define the principals of cavity preparation and instrumentation to accomplish these principles.

46. differentiate between hand cutting instruments and rotatory instruments according to type, function and use.

47. compare different dental cements and liners in relation to physical properties, function indication, types, manipulative and biological consideration.

48. discuss the rationale in selection of amalgam as a restorative material.

49. describe the uses, physical properties and types of dental amalgam used for tooth restorations.

50. enumerate the types and reason for amalgam failure.

51. discuss the rationale for carving and polishing amalgam.

52. demonstrate in a laboratory practice the effect of inadequate manipulation of amalgam (over and under trituration, excess of mercury etc.) in the physical properties of the material and in the final product.

53. discuss the rationale in the selection of resin as a restorative material.

54. describe the uses, physical properties and types of restorative resins used for tooth restorations.

55. differentiate between composite and conventional resins taking into account their physical properties.

56. describe the manipulative considerations associated with restorative resin when used in a dental procedure.

57. discuss the common reasons for failure of restorative resins.

58. discuss the basic procedure in pedodontic and the role of the dental assistant in each procedure specially her role in children management.

59. enumerate the indication and contraindication for pulp capping, pulpotomy, Stainless steel crown and polycarbonate crown procedures.

60. discuss the basic crown and bridge procedures, nomenclature and terminology used.

61. describe the indications and contraindications for fixed prosthodontics.

62. differentiate between different types of fixed prosthetics.

63. identify the instruments and materials for crown and bridge procedures specifically tooth preparation impression, cementation procedure and recognize their use.

64. demonstrate in a laboratory practice and manikin the step by step construction for an acrylic temporary restoration for a crown and bridge procedure.

65. discuss the basic procedures in prosthodontic, the role, of the dental assistant in each procedure, nomenclature and terminology used as it relates to the prosthodontic treatment.

66. enumerate the indications and contraindications for the construction of removable prosthesis.

67. identify the components of a removable partial denture.

68. differentiate between the three types of gypsum products in relation to shape of particles, color setting time and uses.

69. discuss the rationale for the different steps in the construction of a removable partial denture.

70. discuss the basic oral surgery procedures and the role of the dental assistant in each procedure.

71. discuss the nomenclature and terminology used in different oral surgery procedures.

72. discuss the indications and contraindications for oral surgery

73. identify the surgical forceps according to the tooth to be extracted.

74. identify surgical burs for removal of bone.

75. discuss the basic procedures in Periodontic, the role of the dental assistant in each procedure, nomenclature and terminology used.

76. identify and describe the function of the instruments and materials used in periodontal procedures. specifically prophylaxis, root

planning and curretage and gingivectomy procedure.

77. describe the indications and contraindications for periodontal treatment.

78. discuss the basic procedures in endodontic, the role of the dental assistant in each procedure, nomenclature and terminology used.

79. identify and describe the function of the instruments and materials used in endodontic procedures.

80. define the terminology as it relates to endodontic treatment.

81. describe the indication and contraindication for endodontic treatment.

82. define Basic Diagnostic Test commonly used to establish a final diagnosis for root canal treatment.

83. discuss the basic procedure in Orthodontic, the role of the dental assistant in each procedure.

84. define the nomenclature and terminology as it relates to the Orthodontic treatment.

85. describe the factors to be considered before orthodontic treatment.

86. identify and define the categories of Orthodontic treatment.

87. differentiate between fixed and removable appliances with emphasis in the advantages and disadvantages of each type.

88. differentiate the different type of malocclusion according to angle classification.

C. Evaluation

1. Didactic

75% minimum mastery level required in didactic and laboratory

ten - 15 minute quizzes

one - 1 hour midterm

one - 2 hour final exam

Percentage grade on a Quiz A and Midterm	Points
95 - 100%	10 pts.
85 - 94	9 pts.
75 - 84	8 pts.
00 - 74	--

Percentage grade on make-up Quiz	Points
95 - 100%	8 pts.
85 - 94	7 pts.
75 - 84	6 pts.
00 - 74	--

Percentage grade on final exam	Points
95 - 100%	20 pts.
88 - 94	15 pts.
81 - 87	12 pts.
75 - 80	10 pts.
00 - 74	--

If 75% mastery is not shown on the make-up quiz, a verbal examination will be given with a maximum of 3 assigned points if 75% mastery is shown at that time.

Make-up opportunity for the final exam will be based on the individual deficiencies demonstrated in the exam and in no case shall a make-up exam be worth more than five points.

2. Laboratory Evaluation

5 practical quizzes (Quiz B)

Percentage grade on Quiz B	Points
48 - 50	10 pts.
43 - 47	9 pts.
37 - 42	8 pts.

Percentage grade on make-up QuizB	Points
48 - 50	8 pts.
43 - 47	7 pts.
37 - 42	6 pts.

Percentage grade on Midterm, practical and final exam	
39 - 40	40 pts.
36 - 38	30 pts.
32 - 35	24 pts.
30 - 31	20 pts.

Course grade will be assigned according to the following course point tallies:

Didactic	Weight	Laboratory	Weight
123-123 pts	A 50%	123-130 pts.	A 50%
113-122 pts	B	113-122 pts.	B
97-112 pts	C	97-112 pts.	C

Course Outline and Schedule of Instructional Periods

Period	Hours	Topic	Laboratory	Instructor
1	4	Goal Orientation, Course Overview, Clinic Manual		Dr. A. Aja Ms. G. Santiago
		Body Mechanics, Principles of Work Simplification	Motion Picture Simplification	Miss Santiago
2	3 1/2	Introduction to Dental Equipment Operation and Maintenance of: 1. Dental Unit 2. Dental Unit light 3. Dental Chair and Stools 4. Operatory Sinks 5. Operatory Cabinets	Laboratory Practicum 1. Dental unit operation and maintenance 2. Operation of Dental Chair Stools and other equipment	Ms. G. Santiago
3	4	Dental Equipment Rotatory Instruments Operation and Maintenance of: 1. Gear driven handpiece 2. Ultra Speed air driven handpiece 3. Standard contraangle 4. Prophy contra angle	Lab. Practicum Operation and Maintenance 1. handpiece 2. contraangle 3. engine belt	Ms. G. Santiago
4	4	Positioning: Principles of operator assistants, and patients position.	Lab. Practicum operation dental stools patient position, operator position, assistant possition	Ms. G. Santiago
5	3 1/2	Positioning: Basic Instruments 1. Mouth Mirror 2. Explorer 3. Cotton Pliers	Lab. Practicum 1. Role play greeting, escorting seating and dismissing of patient. 2. Use of fulcrum, mirror, and explorer	Ms. G. Santiago
6	4	Saliva Control 1. high volume evaluator 2. saliva ejector 3. cotton rolls 4. aplication of air 5. retraction: cheek, tongue, etc.	Laboratory Slides and Motion Picture on Saliva Control Lab. Practicum saliva control on lab. partner (role play)	Ms. G. Santiago

	3 1/2	Quiz A#2 Concepts of four handed dentistry: 1. basic instrument grasp 2. clock concepts 3. instrument transfer	Lab. Practicum 1. Instrument grasp 2. clock concept 3. instrument transfer	Ms. G. Santiag
[illegible]	4	Oral Exam Procedures Medical and Dental History a. questionnaire method 1. A.D.A. form 2. U.P.R. School of Dentistry form Vital signs Blood Pressure, pulse, respiration	Lab. Practicum Medical and Dental History taking blood pressure, pulse and respiration	Ms. G. Santiag
	4	A. Introduction to anesthesia 1. role of D.A. 2. use of topical anesthesia 3. use of local anesthesia 4. Use of general anesthesia 5. biological consideration B. Anesthesia Materials 1. carpules 2. hypodermic etc.	Lab. Practicum 1. Preparation of Syringe for Local Anesthesia 2. Tray set-up a. Oral Exam b. Local anesthesia	Dr. A. Aja Ms. G. Santiago
10	3 1/2	Introduction to Restorative 1. definition/procedure 2. role D.A. Rubber Dam 1. uses 2. advantages-disadvantages 3. clamp selection 4. biologic consideration Demonstration		Dr. A. Aja
11	4	Rubber Dam - Tray-set-up	Lab. Practicum Rubber Dam Tray Set-up Clamp Selection	Dr. A. Aja Ms. G. Santiago
12	3 1/2		Lab. Practicum Rubber Dam Instrument Transfer	

Period	Hours	Topic	Laboratory	Instructor
13	4	Introduction to Cutting Instruments 1. Hand cutting instrument a. sharpening	Lab. Practicum 1. Recognize hand cutting instruments 2. Practice on sharpening	Dr. A. Aja Ms. G. Santiago
14	4	Cutting Instruments 1. Burs	Lab. Practicum 1. Cleaning and sterilization of burs. 2. Selection of burs.	Dr. A. Aja Ms. G. Santiago
15	3 1/2		Lab. Practicum Instrument Transfer on Hand Cutting Instruments	Ms. Santiago
16	4	Mid-Term Evaluation Period		
17	3 1/2	Sterilization 1. Classification of terms a. sterilization b. disinfection c. sanitation d. contamination 2. Methods a. moist heat b. dry heat c. boiling H₂O d. chemical solution e. hot oil	Lab Practicum operation of: 1. autoclave 2. dryclave 3. zephrin chloride 4. bead sterilizer 5. alcohol wipes	Ms. G. Santiago
18	4		Lab. Practicum Preparation of Material Ultrasonic cleaner scrubbing of instruments packaging of instruments	Ms. G. Santiago
19	4	Introduction to Dental Cements-Cavity Liners, Bases 1. general functions 2. classification 3. types 4. advantages/disadvantages 5. manipulative considerations		Dr. A. Aja

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Period	Hours	Topic	Laboratory	Instructor
		6. effects of cooling agents 7. common reasons for failure of material		
20	3 1/2	Dental Cements 1. instruments 2. tray set-up 3. mixing	Lab. Practicum 1. mixing of dental cements a. cavity liner b. bases c. cementation	Dr. A. Aja Ms. G. Santiago
21	4		Lab. Practicum Dental Cements	
22	3 1/2		Tray set-ups instrument transfer on Dental Cements	
23	4	Introduction to Dental Amalgams 1. introduction 2. physical properties 3. uses 4. types 5. manipulative considerations 6. biological considerations 7. effects of cooling agents 8. common reasons for failure of material		Dr. A. Aja
24	4	Class I Amalgam 1. Tray set-up 2. instruments 3. amalgam preparation	Lab. Practicum 1. Tray set-up 2. Preparation of amalgam	Ms. G. Santiago
25	3 1/2	Class II amalgam 1. Instruments 2. Matrix Band 3. Tray set-up	Lab. Practicum 1. Tray set-up 2. Preparation of amalgam 3. Preparation of Matrix Band	Dr. A. Aja Ms. G. Santiago
26	4		Lab. Practicum Instrument Transfer on Class II Amalgam	Ms. G. Santiago

Period	Hours	Topic	Laboratory	Instructor
27	3 1/2	Introduction to Composite Resins 1. introduction 2. physical properties 3. uses 4. manipulative 5. biologic consideration 6. effects of cooling agents 7. common reasons for failure of material		Dr. A. Aja Ms. G. Santiago
28	4		Lab. Practicum 1. instruments 2. tray set-up 3. manipulation of composite	Dr. A. Aja Ms. G. Santiag
29	4		Lab. Practicum Instrument Transfer on composites	Ms. G. Santiago
30	3 1/2	Practical Exam		
31	4	Charting Procedures Methods	Lab. Practicum	Ms. G. Santiag
32	3 1/2		Lab. Practicum Charting Symbols	Ms. G. Santiag
33	4	Introduction to Pedodontic Restorative Procedures 1. introduction 2. basic procedures a. pulpotomy b. indirect and direct pulp caping c. tray set-up 3. stainless steel crown 4. polycarbonate crown 5. biological consideration 6. role of dental auxiliary		Dr. Aja

Period	Hours	Topic	Laboratory	Instructor
34	4	Pedodontic	Lab. Practicum Tray Set-ups a. pulpotomy b. stainless steel crown	Ms. G. Santiago
35	3 1/2		Lab. Practicum Pedodontic Instrument Transfer	Ms. G. Santiago
36	4	Introduction to Crown and Bridge Procedures 1. introduction role of dental auxiliary 2. nomenclature and terminology 3. instrumentation 4. procedure 5. biological consideration 6. effects of cooling agents		Dr. A. Aja
37	3 1/2		Lab. Practicum 1. instruments 2. tray set ups 3. impression materials	Dr. A. Aja Ms. G. Santiago
38	4		Lab. Practicum 1. demonstration of construction of an acrylic temporary restoration 2. manipulation impression material	Dr. A. Aja Ms. G. Santiago
39	4		Lab. Practicum 1. Manipulation impression material	Dr. A. Aja Ms. G. Santiago
40	3 1/2		Lab. Practicum 1. Crown and Bridge instrument transfer	Dr. A. Aja Ms. G. Santiago

Period	Hours	Topic	Laboratory	Instructor
41	4	Prosthodontic Prob. 1. introduction 2. nomenclature and terminology 3. role and dental auxiliary 4. instruments 5. tray set-ups 6. materials 7. manipulation and properties 8. biologic considerations 9. effects of cooling agents 10. maintenance of laboratory		Dr. A. Aja
42	3 1/2		Mixing of Gypsum Products and Pouring on Rubber Mold	Dr. A. Aja Mr. J. Correa Ms. G. Santiago
43	4		Lab. Practicum Alginate Impression Taking on Manikin	Dr. Aja Mr. J. Correa Ms. G. Santiago
44	4		Lab. Practicum 1. pour study cast in stone 2. trim study casts	Dr. A. Aja Ms. G. Santiago Mr. J. Correa
45	3 1/2		Lab. Practicum Pour and Trim Study Casts	Dr. A. Aja Ms. G. Santiago Mr. J. Correa
46	4		Lab. Practicum Pour and Trim Study Casts	Dr. A. Aja Ms. G. Santiago Mr. J. Correa
47	3 1/2		lab. practicum 1. fabricate custom tray on casts	Dr. A. Aja Ms. G. Santiago Mr. J. Correa

Period	Hours	Topic	Laboratory	Instructor
48	4		Lab. Practicum Fabricate Custom Tray on Cast	Dr. A. Aja Mr. J. Correa Ms. G. Santiago
49	4		Lab. Practicum 1. clean partial denture in ultrasonic 2. polish partial denture on lathe	Dr. A. Aja Ms. G. Santiago Mr. J. Correa
50.	3 1/2	Medical/Dental Emergencies Procedures 1. Common dental emergencies 2. general first aid emergencies a. bleeding b. breathing c. shock 3. symptoms 4. first aid procedures	Lab. Practicum 1. artificial respiration a. mouth to mouth b. oxygen 2. emergency kit	Dr. A. Aja
51	4	Introduction to Oral Surgery Procedures 1. introduction-role of dental auxiliary 2. terminology 3. basic procedures 4. biological considerations 5. instruments 6. materials 7. tray set-up		Dr. A. Aja Ms. G. Santiago
52	3 1/2		Lab. Practicum Oral Surgery 1. Surgical Scrub 2. Forceps 3. Burs	Ms. G. Santiago
53	4		Forceps Simple Tray Set-up	Ms. G. Santiago
54	-		Lab. Practicum 1. Surgical Tray set-ups 2. Sutures removal Tray Set-ups	Ms. G. Santiago

Period	Hours	Topic	Laboratory	Instructor
55	3 1/2	Introduction to Periodontal Procedures 1. introduction 2. nomenclature 3. role of dental auxiliary 4. basic procedures 5. instruments 6. tray set-ups 7. materials 8. manipulation 9. biologic considerations 10. effects of cooling agents		Dr. A. Aja
56	4		Lab. Practicum 1. Periodontic Tray Set-up 2. Cleaning sharpening and sterilization of instruments 3. instrument transfer	Ms. G. Santiago
57	3 1/2	Endodontic Procedures 1. Introduction 2. Terminology 3. Role of dental auxiliary 4. Basic procedures 5. Basic diagnostic concepts 6. instruments 7. tray set-ups 8. materials 9. manipulation 10. biologic considerations 11. effects of cooling agents		Dr. A. Aja Ms. G. Santiago
58	4		Lab. Practicum 1. Endodontic Instrument Tray Set Up 2. Endodontic Instrument Transfer	Ms. G. Santiago

[illegible]	Hours	Topic	Laboratory	Instructor
[illegible]	[illegible]	Orthodontic Procedures 1. introduction 2. nomenclature 3. role of dental auxiliary 4. instrumentation 5. tray set-ups a. examination b. banding c. cementation d. adjustment e. debanding 6. biologic considerations		Dr. A. Aja
60	3 1/2		Lab. Practicum Orthodontic Pliers	Ms. A. Santiago
			Lab. Practicum Assisting in Orthodontic	

Textbook:

H.O. Torres and A. Ehrlich, Modern Dental Assisting, Latest edition.

References:

1. Richard E. Richardson and Roger E. Barton. The Dental Assistant. fourth edition.
2. Wilkins, Esther, Clinical Practice of the Dental Hygienist, fourth edition.
3. Castaño and Alden. Handbook of Expanded Dental Auxiliary Practice.
4. O'Brien and Ryge, An Outline of Dental Materials. 1978.
5. Robert G. Craig, et. al., Dental Materials, 1975.

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Developed by. Mrs. Norma Morales

February, 1979

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS
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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Dental Office Management/Ethics and Jurisprudence
II. Course Number: PAXD 003
III. Credit Hours: 3
IV. Clock Hours: 36 Lecture
V. Description:

This course is designed to provide the student with a comprehensive knowledge of the administrative procedures included in patient management and the dental office in general. This course also presents basic ethical principles related to the dental auxiliary profession and is designed to familiarize the students with the legal framework of dentistry and the implications that may affect them as part of the dental health team.

VI. Objectives

A. General

To familiarize students with the effective performance of dental auxiliaries as members of a dental health team and their administrative, ethical and legal responsibilities in the dental practice.

B. Operational

At the end of this course the student will:

1. explain course contents and objectives.
2. discuss the role of the dental auxiliary in private practice.
3. recognize the importance of some significant events in the history of Dentistry.
4. recognize the different professions related with C.P.R.
5. differentiate , in exam, between responsibilities in private office and public health.
6. discuss in class the role of the auxiliary in private enterprises.

7. differentiate on a written exam, between a solo and a group practice.
8. discuss in class the different types of payment plan available to the dental practice.
9. discuss in class how dental office facilities i.e., operatories, lab, office, etc., can affect a dental practice.
10. organize patients records utilizing the numerical and alphabetical system.
11. recognize the different catalogue used to order equipment and material.
12. discuss characteristics of appointment book entries.
13. explain how to handle a broken appointment situation.
14. illustrate the use of a daily schedule form for appointment control and the recall patients.
15. state the difference in the bookeeping procedures used in the dental office.
16. to fill bank deposits slips and credit cards in laboratory session.
17. explain and illustrate the different payment methods used by dental offices.
18. to fill out different forms of dental health plans in laboratory session.
19. describe on a written exam different methods of dental health payment plans.
20. demonstrate the procedures for ordering materials and equipment.
21. demonstrate in a role playing situation the procedures for receiving and dismissing patients.

22. demonstrate in a role playing situation, the proper approach to be utilized when placing and receiving telephone calls in a dental office.

23. relate the importance of good inter-personal relations among team members to a successful dental practice.

24. state on a written exam a method to maintain efficient supply control in a dental practice.

25. apply in class implications of communication skills both verbal and non verbal in the procedures of patient management.

26. differentiate on an exam, between ethical and legal responsibilities that pertain to dental auxiliaries.

27. differentiate on an exam, between liability, malpractice, technical assault and breach of contact, in the practice of dentistry.

28. differentiate different methods used to request material and equipment by mail, telephone or personal.

29. discuss in class the Dental Practice Act, and how it relates to the dental auxiliary in Puerto Rico.

30. discuss in class the role of the certifying and licensing boards for dental auxiliaries.

VII. Course Outline and Schedule of Instructional Periods.

Period	Hours	Topic
1	2	Course Overview and Course Objectives (Goal Orientation) Role of the Dental Auxiliary in Private Practice
2	2	Quiz A Significant Events in the History of Dentistry

Period	Hours	Topic
3	2	Allied Health and Professional Relations Career Options: Public Health Private Practice Private Enterprise
4	2	Quiz A Ethical Responsibilities of the Dental Auxiliary The Dental Office: Solo Practice Group Practice Student report - Facilities: operatory, waiting room, lab., dark room.
5	2	Quiz A Interpersonal Relations: a. dentist-patient b. auxiliary-patient c. dental health team members Ethical Responsibilities of the Dental Auxiliary.
6	2 (Simulation)	Quiz A Appointment Control: Appointment Book: types - advantages disadvantages buffer time Appointment card: types Canceled Appointments: call list Broken Appointments Recall System: types advantages-disadvantages
7	4	Banking Procedures A. Bank deposits B. Credit Cards 1. Ideal 2. Bankamericard (Visa) 3. Master Charge
8	4	Dental Health Payment Plans: advantage-disadvantage Triple S ACCA Blue Cross VIA Medicaid Others

Period	Hours	Topic
9	4	Quiz A General Office Communication Telephone Calls incoming outgoing Incoming Mail sorting Person to Person Office Communication receiving patients and visitors scheduling appointments collecting fees and issuing receipts dismissing patients
10	4	Quiz A Supply Control: Methods Ordering Phone vs. mail
11	4 (Student report)	Mid-term Quiz A Filing Systems: alphabetical numerical cross-index
12	4	Quiz A Dental Jurisprudence Introduction to Legal Aspects Legislation in Puerto Rico Malpractice Certification and Licensure Professional Associations

VIII. Teaching Methods:

- Lectures
- Oral Reports
- Class discussions
- Role Playing
- Laboratory session

IX. Media:

Chalkboard, handouts, slides, laboratory

X. Evaluation: 80% minimum mastery level required

7 quizzes of 15 minutes total worth 100 points
(6=15 pts. 1-10 pts.)

1 midterm points
1 final points

% grade Quiz A	Course Points
93 - 100%	15 - 10
85 - 92	14 - 9
80 - 84	13 - 8
79 or lower	-- --

% grade Quiz B	Course Points
93 - 100%	13 - 8
85 - 92	12 - 7
80 - 84	11 - 6
79% or lower	-- --

Percentage grade on Midterm.

Percentage grade on Final.

If student fails Quiz B can take an oral Quiz C for maximum 4 pts.

Total Course Points	Grade
123-130	A
113-122	B
97-112	C

XI. Prerequisite Courses:

All courses work previous to this trimester.

XII. Textbook:

1. Torres and Ehrlich, Modern Dental Assisting, Saunders, Philadelphia 1976.
2. Ethics and Jurisprudence, The Colwell Company by Ann Ehrlich. CDA, BA Managing the Dental Practice (A guide for the Dental Assistant)

XIII. References:

Current dental literature (including journal articles).

Dental Hygiene Journal, Dental Assistant Journal.

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Developed by Mrs. Josephine Rosa , August, 1977
Revised by Mrs. Gloria Vázquez, February, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Anatomy and Physiology

II. Number: PAXD 042

III. Credit Hours: 3

IV. Clock Hours: 36

V. Media: Projected material: films, radiographs, models

VI. Course Description

The course presents core concepts in anatomy and physiology and is intended to provide dental auxiliaries with the knowledge of normal human anatomy and how the body functions in normal situations for recognizing the manifestation of disease and anatomic anomalies.

VII. Objectives

A. General

1. Develop knowledge of the basic concepts of human body structures and functions.

2. Develop basic concepts about normal human anatomy and physiology for recognizing the manifestations of disease and anatomical anomalies.

B. Operational

T 1. Discuss the anatomical terminology: directions, planes and cavities

E 1. describe the anatomic positions

E 2. name 10 terms of position and direction

E 3. describe the three imaginary planes of the body

E 4. state two body cavities

E 5. differentiate between thoracic cavity and abdominal pelvic cavity

E 6. locate nine abdominal regions

T 2. Describe the life supporting physiological processes that take place within cells

E 1. describe homeostasis

E 2. name the passive modes of transport

E 3. define osmosis

E 4. define diffusion process

E 5. state the difference between osmosis and diffusion

E 6. relate the filtration process to the fluid pressure

E 7. describe the basic mechanism of active transport

E 8. describe the importance of water balance in the homeostatic process

E 9. relate electrolite balance to osmotic pressure

E 10. define dehydration

E 11. state four principal causes of edema

T 3. Explain the structure of the integument

E 1. state the parts of the integumentary system

T 4. Discuss the functions of the integuments

E 1. Mention four functions of the integumentary system

T 5. Explain the process of bone formation and disorders of bone development

E 1. state three regulatory substances needed for normal bone deposition

E 2. name five disorders of bone development

T 6. Describe the human skeleton and vertebral column

E 1. state the morphologic description of the skeleton

E 2. name the divisions of the axial skeleton

E 3. identify the four curves of the vertebral column

E 4. name five principal features of the vertebrae

E 5. state the distinguishing features of thoracic vertebrae

T 7. Describe the bony structure of the thorax

E 1. locate the four principal groups of thorax bones

E 2. identify the sternum process

E 3. name the sternum articulations

E 4. identify the parts of a rib

T 8. Discuss the pectoral girdle

E 1. name the bones forming the pectoral girdle

E 2. state the function of the humerus and the scapula

T 9. Explain the functions of the pelvic girdle and the lower extremity

E 1. name the bones of the pelvic girdle

E 2. describe the function of the hip bones

E 3. describe the anterior aspect of the femur

E 4. state the function of the femur

E 5 locate the fibula

T 10. Evaluate the diseases and injuries affecting the skeletal system

E 1. name four diseases that may affect the skeletal system

E 2. indicate four types of fractures

E 3. describe two phases of treatment

T 11. Classify joints according to the degree of movement and structural characteristics

E 1. list four types of joints

E 2. define synarthrosis

E 3. list two examples of synarthrosis

E 4. compare synhodiosis and synarthrosis

E 5. state the difference between amphiarthrosis and diarthrosis

T 12. Explain the diseases of the joints

E 1. list four conditions associated to inflammation of the joint

E 2. define bunion

E 3. state two causes of sprain

T 13. Discuss the different types of muscles relating to structure and function

E 1. identify the different types of muscles

E 2. differentiate between smooth, skeletal and cardiac muscle relating to function

T 14. Explain properties of muscle related to contraction

E 1. discuss the following phenomena of muscle contraction heat rigor, tetany clonus, spasm and fatigue

E 2. Explain the conduction of a contractile impulse at the neuromuscular union

T 15. Discuss criteria used for naming muscle groups

E 1. state examples of each criteria used for naming muscle groups

T 16. Evaluate anatomy, functions and disorders of the voluntary nervous system

E 1. identify the three main types of neurous

E 2. discuss the physiology of nervous tissue in terms of transmission of the nerve impulse

E 3. describe the anatomy and functions of the spinal cord and the nerves arising from it

E 4. summarize most important disorders involving the cranial nerves

T 17. Describe the involuntary nervous system

- E 1. identify the structure of the autonomic nervous system
- E 2. explain the mechanism of central control of the autonomic nervous system
- E 3. discuss the sympathetic syndrome

T 18. Discuss the digestive system structure and function

- E 1. identify digestive organs
- E 2. explain the digestive process
- E 3. discuss the hormonal control of digestion
- E 4. describe and explain the nervous control of the digestive tract

T 19. Describe the circulatory system

- E 1. identify anatomical structures of the heart
- E 2. explain the process of general circulation
- E 3. identify the principal systemic arteries and veins
- E 4. list the most common abnormal conditions related to blood circulation

T 20. Describe general anatomical and physiological conditions which might affect normal breathing

- E 1. describe the mechanism of breathing
- E 2. explain the concept of lung volume
- E 3. discuss the neural control of breathing
- E 4. explain the chemical regulation of breathing
- E 5. state and discuss the respiratory function of the blood
- E 6. state the difference between internal and external respiration
- E 7. point out and discuss conditions that may affect normal breathing

I 21. Describe the structures, functions, and most common abnormal conditions affecting the excretory system

- E 1. identify the anatomical structures of the excretory system
- E 2. name the functions of the kidney
- E 3. discuss the process of urine formation
- E 4. recognize the clinical considerations concerning the excretory system

I 22. Explain the importance and function of the endocrine system

- E 1. distinguish the chemical nature of hormones
- E 2. interpret the function of the different hormone of the human body

I 23. Discuss the main glands of the human body and its function.

- E 1. name the main glands of the human body and its hormones

I 24. Express the general anatomy and function of the lymphatic system

- E 1. discuss the function of the lymphatic system and its relation to the spread of infections.

I 25. Describe the structure and functions of the reproductive system

- E 1. identify the male and female organs
- E 2. discuss the process of sperm and ovum formation
- E 3. list and explain the most common disorders of the female and male reproductive system

VIII. Course Outline and Schedule of Instructional Periods

A. Introduction and Course Overview

1. Anatomical Terminology and Regions of the human body.
    a. Anatomic positions and directions
    b. Three imaginary planes of the body.
    c. The body cavities
    d. Abdominal regions
2. Supporting physiological processes
    a. Homeostasis
    b. Passive modes of transport
    c. Osmosis
    d. Diffusion process
    e. Active transport
    f. Dehydration
    g. Causes of edema
3. Structure of the integument
    a. parts of the integumentary system
    b. functions of the integumentary system
4. Process of bone formation and disorders of bone development
    a. Regulatory substance for bone deposition
    b. Disorders of bone development
    c. Description of the human skeleton and vertebral column
        1. morphologic description of the skeleton
        2. divisions of the axial skeleton
        3. four curves of the vertebral column
        4. principles features of the vertebral
        5. distinguishing features of thoracic vertebrae

- d. The bony structure of thoracic vertebrae
    - 1. the four principal groups of thornx
    - 2. the sternum process
    - 3. the sternum articulations
    - 4. parts of a rib
- e. The Pectoral girdle
    - 1. bones forming the pectoral girdle
    - 2. function of the humerus and scapula

5. Different types of muscles relating to structure and function
    - a. different types of muscles
    - b. differentiate between smooth, skeletal and cardiac muscle relating to function
    - c. properties of a muscle related to contraction
    - d. criteria used for naming muscle groups
6. Anatomic functions and disorders of the voluntary nervous system
    - a. types of neurons
    - b. physiology of nervous tissue in terms of transmission of the nerve impulse
    - c. anatomy and functions of the spinal cord and the nerves arising from it.
    - d. disorders involving the cranial nerves
7. Involuntary nervous system
    - a. structure of the autonomic nervous system
    - b. central control mechanism of the autonomic nervous system
    - c. the sympathetic syndrome

8. Digestive system structure and function
    a. digestive organs
    b. digestive process
    c. hormonal control of digestion
    d. nervous control of the digestive tract
9. Circulatory System
    a. anatomical structures of the heart
    b. process of general circulation
    c. principal systemic arteries and veins
    d. common abnormal conditions related to blood circulation
10. Respiratory System
    a. General anatomical and physiological conditions which might affect normal breathing.
        1. mechanism of breathing
        2. concept of lung volume
        3. neural control of breathing
        4. chemical regulation of breathing
        5. respiratory function of the blood
        6. difference between internal and external respiration
        7. conditions that may affect normal breathing
11. Excretory System
    a. Structures, functions and most common abnormal conditions affecting the excretory system
        1. anatomical structures of the excretory system
        2. functions of the kidney
        3. process of urine formation

4. clinical considerations concerning the excretory system

12. Endocrine System

    a. Importance and function of the endocrine system

        1. chemical nature of hormones

        2. function of the different hormone of the human body

    b. Main glands of the human body and its function

        1. main glands of the human body and its hormones

13. Lymphatic System

    a. General anatomy and function of the lymphatic system

        1. function of the lymphatic system and its relation to the spread of infections

14. Reproductive System

    a. Structure and functions of the reproductive system

        1. male and female organs

        2. process of sperm and ovum formation

        3. common disorders of the female and male reproductive system.

IX. Evaluation - minimum mastery level of 80% is required

1. Two partial examinations including two thirds of the course, 100 points each.

2. Post test at the end of the course, 100 points (total 300 points)

X. Schedule of Instructional Periods

Period	Hours	Topic
I	1.5	Course Objectives, Evaluation procedures, anatomical terminology and regions of the human body.
II	1.5	Supporting physiological processes
III	1.5	Integumentary System
IV	1.5	Skeletal System
V	1.5	Skeletal System
VI	1.5	Skeletal System
VII	1.5	Muscular System
VIII	1.5	Muscular System
IX	1.5	Nervous System
X	1.5	Nervous System
XI	1.5	Partial Exam
XII	1.5	Digestive System
XIII	1.5	Circulatory System
XIV	1.5	Respiratory System
XV	1.5	Excretory System
XVI	1.5	Endocrine System
XVII	1.5	Endocrine System
XVIII	1.5	Partial Exam
XIX	1.5	Lymphatic System
XX	1.5	Reproductive System
XXI	1.5	Reproductive System
XXII	1.5	Remediative Session
XXIII	1.5	Review
XXIV	1.5	Final Exam

XI. Pre-requisite Course

Oral Histology and Embryology

XII. Textbook

Anderson, Clinical Anatomy and Physiology for Allied Health Sciences

XIII. References

1. Grant, Grant's Atlas of Anatomy
2. Hollinshead, The Head and Neck

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Developed by Dr. José Orlando Rojas

February, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title - Preventive Dentistry I
II. Course Number: PAXD 027
III. Credit Hours: 3
IV. Clock Hours: 36
V. Methodology: Lectures, Demonstration, Role Playing
VI. Course Description:

This course will introduce the student to basic preventive dentistry terminology and procedures, and will enable the students to understand the processes of caries formation and initiation of periodontal disease.

VII. General Objectives

At the end of this course the student will be able to evaluate the different preventive measures available to prevent oral disease, their application on a particular patient, and how to communicate with the patient. The student will also be able to understand and discuss the mechanisms of dental caries formation and periodontal disease.

VIII. Operational Objectives

T1 Discuss the phylosophy, rationale and present day concepts of preventive dentistry.

- E1 Explain the concept of preventive dentistry.
- E2 Explain the ecological concept of disease and differentiate between its different elements.
- E3 Analyze the natural history of disease and apply to oral disease.
- E4 Distinguish between primary, secondary, and tertiary levels of prevention and relate them to dentistry.

T2 Compare the different oral soft deposits as to formation, structure retention, and potential for damage.

E1 Discuss acquired pellicle as related to formation, structure, and significance.

E2 Discuss dental plaque as to structure, formation, retention, and significance.

E3 Discuss the role of dental plaque in caries formation.

E4 Discuss the role of dental plaque in periodontal disease.

E5 Discuss food debris as to structure formation, retention, and significance.

E6 Discuss materia alba as to structure, formation, retention, and significance.

T3 Analyze dental calculus as to formation, cause, and effects.

E1 Discuss supragingival calculus as to structure, formation, retention, and significance.

E2 Discuss subgingival calculus as to structure, formation, retention, and significance.

T4 Analyze the relevance of stain formation as a tooth deposit.

E1 Differentiate between extrinsic, intrinsic, exogenous, and endogenous stains.

E2 Differentiate between the different kinds of stains as to cause, prevalence, and clinical appearance.

E3 Discuss the different methods for stain removal and select the appropriate one for a particular stain.

E4 Evaluate the precautions required during stain removal procedures.

T5 Evaluate the procedures and aids for an effective plaque control program and apply them to an individual patient.

E1 Define plaque control

E2 Evaluate the procedures utilized in each appointment in a plaque control program.

E3 Appraise the value of disclosing solutions for tablets in a plaque control program.

E4 Identify the charting forms utilized in a plaque control program and be able to employ them properly.

E5 Explain the procedures utilized for obtaining a plaque index, and its significance.

E6 Discuss the importance of recall visits and their frequency.

T6 Analyze the correct use of a proper toothbrush as a primary preventive measure.

E1 Distinguish the desirable characteristics of a toothbrush.

E2 Evaluate the factors for proper toothbrush selection.

E3 Evaluate the use of nylon vs. natural bristles in a toothbrush.

E4 Compare between soft and hard bristles as to their effect on soft and hard oral tissues.

E5 Analyze the effects of different brushing planes on toothbrushes and choose the most adequate.

E6 Discuss proper toothbrush care.

E7 Evaluate the uses and indications of electric toothbrushes.

E8 Discuss the purposes, indications, techniques, and problems of different toothbrushing methods.

E9 Choose the best toothbrush and toothbrushing method for an individual patient.

E10 Discuss the importance of tongue brushing.

T7 Evaluate interdental plaque control as a primary preventive measure.

E1 Discuss the objectives of interdental plaque control.

E2 Analyze the correct use of dental floss and compare to the incorrect use.

E3 Discuss the different aids available for interdental plaque control and evaluate their indications and contraindications.

T8 Evaluate the importance of communications in human relations and apply this knowledge to specific clinical situations.

E1 Analyze Berlo's theory of communication.

E2 Distinguish the various road blocks to communication, particularly when talking to a patient.

E3 Evaluate different ways of giving instructions to a patient and choose the best for a particular patient.

E4 Choose the best way of answering a question made by a patient by applying communication skills.

T9 Apply communication skills in a simulated clinical situation.

E1 Demonstrate communication skills while giving instructions to a patient regarding:

a. toothbrushing
b. use of dental floss
c. impression taking procedures.

E2 Judge effectiveness of communication achieved by classmates.

T10 Evaluate commercial dentrifices and mouthwashes

E1 Compare abrasivity of various dentrifices

E2 Analyze the purpose of components of a dentrifice.

E3 Analyze the factors to be considered in dentrifice selection for a patient.

E4 Compare the effectiveness of a mouthwash vs. toothbrushing.

E5 Discuss the uses and objectives of mouthwashes.

T11 Evaluate the different uses of fluoride as a primary preventive measure.

- E1 Analyze the different ways in which fluoride becomes incorporated into the tooth structure.
- E2 Analyze the theories explaining the effect of fluoride.
- E3 Analyze the cause of dental fluorosis and its clinical significance.
- E4 Evaluate the purpose, mechanism of action, and benefits of water fluoridation.
- E5 Evaluate the purpose, mechanisms of action, and benefits of topical fluoride application.
- E6 Evaluate the different topical fluoride compounds and compare their characteristics, advantages, and disadvantages.

TT2 Evaluate the use of pit and fissure sealants as a primary preventive measure.

- E1 Define pit and fissure sealant.
- E2 Evaluate the indications and contraindications of pit and fissure sealants.
- E3 Discuss the mechanism of action of sealants and compare to that of fluorides.
- E4 Discuss the mechanism of retention of sealants.
- E5 Compare between self-polymerizing and u.v. polymerizing sealants.
- E6 Evaluate the importance of moisture control during sealant application.
- E7 Evaluate the relationship of sealants to other preventive measures.
- E8 Discuss the proper sequence for sealant application in a preventive program.

TT3 Discuss the ecological concepts of dental caries.

- E1 Describe the types of dental caries.
- E2 Discuss the three common locations of carious lesions.
- E3 Differentiate between acute, chronic, rampant, recurrent arrested, and incipient caries.

E4 Evaluate different methods for caries control.

E5 Compare the different theories of caries formation.

E6 Discuss the role of plaque in caries formation.

E7 Evaluate the role of carbohydrates in caries formation.

E8 Evaluate the various contributory factors in caries formation.

E9 Discuss the factors effecting the rate of destruction.

T14 Describe the progression of caries and the effect on pulpal and periapical tissue.

E1 Compare the different causes for pulpal injury.

E2 Compare the pattern of decay in different types of caries.

E3 Describe the progression of pulpal injury through hyperemia, pulpitis, periapical abscess, and fistula.

E4 Discuss the protective mechanisms of the pulp.

T15 Discuss the role of plaque and other factors in the initiation of periodontal disease.

E1 Describe the four basic periodontal tissues.

E2 Discuss the various types of peridontal disease.

E3 Evaluate intrinsic and extrinsic factors in the initiation of periodontal disease.

E4 Evaluate the role of plaque and calculus as initiators of periodontal disease.

E5 Compare a periodontal pocket vs. a healthy sulcus.

E6 Discuss the effect of pocket formation on adjacent structures.

E7 Evaluate the role of local irritants in pocket formation.

E8 List ways in which periodontal pockets can be eliminated.

T16 Analyze the different elements of a balanced diet and their importance.

E1 Discuss the concept of balanced nutrition.

E2 Discuss the essential nutrients (proteins, carbohydrates, grease, vitamins, and minerals).

E3 Recognize those deficiencies of essential nutrients with direct effect on the oral cavity.

T17 Discuss the effects of various kinds of diets on oral tissues.

E1 Compare between soft, fibrous, and abrasive diets and their effect on oral hard and soft tissues.

E2 Discuss the effects of diets high in fluoride, high in carbohydrates, low on vitamins, and low in minerals on oral health.

T18 Evaluate the cariogenicity of various types of foodstuffs.

E1 Evalute the effect of fermentable carbohydrates on acid production of oral bacteria.

E2 Discuss the effects of eating sweets between meals.

E3 Differentiate between liquid, retentive, and sticky sugary foods.

T19 Analyze the sugar intake of a patient.

E1 Discuss how the data is obtained and sorted for a carbohydrate intake analysis.

E2 Employ the clinical data of a patient to perform a carbohydrate intake analysis and evaluate the sugar consumption of the patient.

IX. Course Outline

Period	Topic
1	Course Overview Prevention concepts Tooth deposits a. acquired pellicle b. plaque
2	Tooth deposits a. plaque b. materia alba c. food debris d. calculus e. stain formation

Period	Topic
3	Tooth deposits a. stain formation (continued) Plaque control a. definition b. procedures c. use of disclosing solutions d. plaque index e. recall visits
4	Toothbrushing as a primary preventive measure a. desirable characteristics b. factors in selection c. nylon vs. natural bistles d. soft vs. hard bristles e. importance of brushing plane f. electric toothbrushes g. toothbrushing methods Interdental plaque control a. objectives b. use of dental floss
5	Interdental plaque control (cont.) a. aids available Communication skills a. Berlo's theory of communication b. barriers to communication c. giving instructions to a patient d. answering a patient's questions
6	Communication skills a. role playing Dentrifices and mouthwashes a. abrasivity of dentrifices b. components of dentrifices c. dentrifice selection d. effectiveness of mouthwashes e. uses of mouthwashes Fluorides a. incorporation into tooth structure b. mechanism of action

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Title: Expanded Functions in Restorative

II. Course Number: PAXD 029

III. Credit Hours: 3

IV. Clock Hours: 26 hours lab. 24 lecture

V. Methodology: Lecture, Laboratory, Clinic

VI. Description:

This course introduces the dental auxiliary student to the operational experiences necessary to develop the basic skills in the most common restorative operative procedures; in order to develop proficiency in this field. Laboratory and clinical practice will be included. Four handed dentistry concepts will be emphasized.

VII. Objectives

A. General

To develop in the student the basic and necessary percepto-motor skills and a critical and autoevaluative mind in the utilization and manipulation of instruments and materials used during the different restorative procedures.

B. Operational

At the end of the educational experiences, the student will:

1. place and remove a rubber dam on a manikin in laboratory and on a clinic partner in clinic.
2. manipulate zinc oxide eugenol and zinc phosphate to be used as a temporary restoration, an intermediary base, or as a cement.
3. remove excess cement from a prepared tooth on a manikin.

4. place and remove matrices and wedges on a manikin in laboratory
5. apply cavity varnish to a prepared tooth on a manikin
6. place, carve and finish an amalgam restoration in a class I, class II, and class V cavity preparation on a manikin in laboratory.
7. place and finish a composite resin restoration in a class III, class IV and class V cavity preparation on a manikin in laboratory.
8. Demonstrate in a laboratory practice in a manikin instrument grasp and operator position for working in different quadrants.

VIII. Course Outline and Schedule of Instruction

A. Course Outline

1. Laboratory Policies and Procedures; Course Overview
2. Rubber Dam Project
    a. Procedure for Rubber Dam Placement
        1. Analysis of the area
            a. position and location of teeth
            b. previous restorations
            c. location of decay
        2. Clamp selection
        3. Appropriate punch for different quadrants
        4. Clamp stability
        5. No trauma to hard or soft tissue
        6. Contacts are flossed
        7. Position of frame
        8. Invagination
        9. Criteria for evaluating project

3. Instruments grasp and operator patient position for working in different quadrants.
    a. Instrument grasp
        1. pen grasp
        2. modified pen grasp
        3. palm grasp
    b. Movement during restorative procedures
        1. finger
        2. wrist
        3. arm
        4. body
    c. Use of fulcrum
4. Dental Cements, Cavity Lining Agents and Temporary Restoration Project
    a. Function
    b. Manipulative considerations
    c. Evaluation criteria
        1. class I - ZOE temporary
        2. class I varnish, Zinc Phosphate - Intermediary Base
        3. class III dycal
    d. Demonstration for
        1. class I - ZOE Temporary
        2. class I- varnish, Zinc phosphate - Intermediary Base
        3. class III - dycal
5. Class III Composite Restoration - Project
    a. Manipulative Considerations

        1. mixing
        2. placement of band and wedge
        3. placement of composite
        4. excess removal
        5. finishing
        6. polishing

6. Class V Resin Restoration Project
    a. Backgroun in formation
        1. mixing
        2. placement of composite
        3. excess removal
        4. finishing
        5. polishing
        6. criteria for evaluating project - see appendix
7. Class IV Resin Restoration Project
    a. mixing
    b. placement of band and wedge
    c. placement of composite
    d. excess removal
    e. finishing
    f. polishing
    g. criteria for evaluating project - see appendix
8. Class I amalgam Restoration Project
    a. Background information
        1. copal varnish
        2. placement and condensation
            a. background information
            b. instruments

        c. procedure

    3. carving

        a. background information

        b. instruments

        c. procedure

    4. adjusting the occlusion

        a. centric occlusion

        b. premature centric contact

        c. excursive occlusion

        d. premature excursive occlusion

        e. procedure for removing premature contacts

    5. finishing and polishing

        a. back-ground information

        b. instruments

        c. step by step procedure

    6. criteria for evaluating project - see appendix

9. Class II Amalgam Restoration Project

    1. copal varnish

    2. band, retainer and wedge application

        a. step by step procedure

    3. placement and condensation of amalgam

        a. background information

        b. instruments

        c. step by step procedure

    4. carving

        a. background information

        b. instruments

        c. procedure

    5. adjusting occlusion (same as for class I)
    6. finishing and polishing (same as for class I)
    7. criteria for evaluating project -see appendix

10. Class V Amalgam Restoration Project
    a. copal varnish
    b. placement and condensation of amalgam
        1. background information
        2. step by step procedure
    c. carving
        1. background information
        2. step by step procedure
    d. finishing and polishing
        1. background information
    e. criteria for evaluating Project - see appendix

11. Polishing Amalgam Project
    a. Biologic considerations
    b. Cooling agent effect
    c. Instrumentation
    d. Step by step procedure
    e. Criteria for evaluating project

B. Schedule of Instructional Periods

Periods	Hours	Topic	Methodology
1	2 1/2	Lab. Policies and Procedures Procedure for Rubber Dam Placement	Lecture Lecture Laboratory
2	2 1/2	Rubber Dam Project	Laboratory
3	2 1/2	Rubber Dam Project	Clinic
4	2 1/2	Rubber Dam Project	Clinic
5	2 1/2	Instrument grasp, patient-operator position	Lecture Laboratory

Periods	Hours	Topic	Methodology
6	2 1/2	Dental Cements, Cavity Lining agents, Temporary	Lecture Demonstrations Lab.
7	2 1/2	Dental Cements Project	Laboratory
8	2 1/2	Dental Cement Project	Practical Exam
9	2 1/2	Composite Resin Class III Resin Restoration Project	Lecture Demonstration
10	2 1/2	Class III Resin Restoration Project	Laboratory
11	2 1/2	Class III Resin Class V Resin Project	Practical Test Lecture Demonstration
12	2 1/2	Class V Resin Project	Laboratory
13	2 1/2	Class V Resin Project	Practical Test
14	2 1/2	Class IV Resin Project	Lecture Demonstration Laboratory
15	2 1/2	Class IV Resin Project	Laboratory
16	2 1/2	Class I amalgam	Lectures Laboratory Demonstration
17	2 1/2	Class I amalgam	Laboratory
18	2 1/2	Class I amalgam	Practical Test
19	2 1/2	Class II amalgam	lecture Demonstration Laboratory
20	2 1/2	Class II amalgam	Laboratory
21	2 1/2	Class II amalgam	Practical Test
22	2 1/2	Class V amalgam	Lecture Demonstration
23	2 1/2	Class V	Laboratory
24	2 1/2	Class V	Practical Test

Student who does not demonstrate proficiency in laboratory, will continue practice until proficiency is demonstrated.

Clinical experiences with patient will be provided for those students completing lab restorative requirements in less time than provided.

IX. Teaching Methods

A. Lectures

B. Small group demonstrations

C. Laboratory projects

D. Clinic

X. Media

Manikins, chalkboards, project acorde material, written lectures, discussions, videotapes.

XI. Evaluation

A weekly quiz throughout the course will be given making a total of 100 points.

A 100 point final test will be administered making a total of 200 points in the didactic part.

Each step in the restorative project will be observed during practice. Students will be questioned by instructors and doubts will be clarified. The laboratory performance will be evaluated on a scale of 5-0:

5: All criteria are acceptable

4: Not more than one criteria is unacceptable for procedures having four (4) criteria . For those having eight criteria not more than two (2) criteria are unacceptable.

3: Not more than two (2) criteria are unacceptable for procedures having four (4) criteria. For those having eight (8) criteria not more than four (4) criteria are unacceptable.

2: Not more than three (3) criteria are unacceptable for procedures having four (4) criteria. For those having eight (8) criteria, not more than six (6) criteria are unacceptable.

1: The four criteria are unacceptable for procedures having four (4) criteria. For those having eight (8) criteria, eight (8) criteria are unacceptable

0: Not observed

Evaluative criteria for each procedure appended.

Passing score is three (3) for any procedure. Those students failing in any given practical test will take the test again after meeting with the instructor and all doubts clarified. Passing score will be the same.

For final grade in the lab procedures, the following formula will be utilized: $\%p = \underline{\hspace{2cm}} = \frac{\text{puntos obtenidos}}{\text{puntuación máxima posible}}$

Students below the minimum mastery level of 75% in quizzes will take a remedial quiz (B).

Scale for Quiz B

20 - X
19 - X
18 - 20
17 - 18
16 - 17
15 - 16 - 75% For the final grade in the course.

Weight assigned to laboratory will be twice the weight of didactic part.

XII. Pre-requisite Course

All courses in the first trimester.

Preventive Dentistry II (concurrently)

XIII. Textbooks

Howard, William W., Atlas of Operative Dentistry - Mosby, last edition.

XIV. References

1. Richardson, Richard E. and Barton, Roger E. The Dental Assistant, McGraw Hill, fourth edition.

2. Tooth Carving Manual, William Gold Refining Co., Inc. 1967.

rls

Developed by Dr. Angel Aja 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Expanded Functions in Preventive Procedures
I. Course Number: PAXD 023
I. Credit Hours: 4
V. Clock Hours: 12 Lectures/ 72 lab.
V. Methodology: Lecture and Laboratory
I. Description:

A general review of the operational experiences necessary to develop the basic skills in the most basic preventive dentistry procedures in order to develop proficiency in this field. Clinical experience is provided.

I. Objectives:

A. General

Impart knowledge and develop skills in applying preventive measures such as polishing coronal surfaces of teeth and application of anticariogenic agents. Experiences in the making of impressions and removal of surgical sutures will also be provided.

B. Operational

At the end of the educational experiences the student will:

1. In a written exam, discuss the different advantages of utilizing the porte polisher and wood points for polishing.

2. Explain on a written exam the advantages and disadvantages of utilizing the prophylaxis angle of polishing.
3. Describe on a written exam the most commonly used abrasives and polishing agents used in dentistry.
4. Identify on a written exam the different methods utilized to reduce friction during polishing procedures.
5. Arrange in a systematic order items of the oral inspection before performing polishing.
6. Utilize disclosing solution before and after polishing of all teeth to determine complete removal of all significant plaque, stain, and tarnish.
7. Perform a complete polishing of all coronal surfaces.
8. In writing, describe the benefits and limitations of fluoride-containing prophylaxis pastes, mouth rinses and sprays.
9. In writing, describe the differences between topical fluorides in gel form and solution form.
10. Demonstrate the correct armamentarium set-up for a topical demonstration of fluoride.
11. In laboratory, apply fluoride to teeth using the tray technique.

12. Apply fluoride to teeth utilizing the method of isolation.

13. Seal pits and fissures of molars in a laboratory setting:
    - a. cleanse the tooth of all deposits and debris
    - b. isolate tooth
    - c. dry the tooth
    - d. apply conditioner for enamel etching
    - e. rinse thoroughly
    - f. dry thoroughly
    - g. apply the sealant
    - h. rinse

14. Discuss in class the effects of cooling agents on a tooth with sensitivity in the cervical area.

15. Discuss the factors contributing to hypersensitivity of a tooth.

16. Describe, on a written exam, the effects of a dentrifice containing strontium chloride and one containing sodium monofluorophosphate.

17. Demonstrate on a manikin tooth, the correct technique for a desensitizing treatment utilizing Sodium Fluoride aqueous solution.

18. Take an impression on a lab partner by:
    - a. selecting proper tray
    - b. beading of tray as needed
    - c. mix impression material
    - d. fill impression tray
    - e. pre-coat undercut areas
    - f. proper insertion of tray
    - g. proper removal of tray
19. Take a wax bite on a lab partner.
20. Describe on a written exam, the problems that may exist which may interfere with direct occlusion of study casts.
21. Describe on a written exam, the procedures for removal of interrupted sutures and continuous sutures.

VIII. Course Outline and Schedule of Instruction:

Period	Hours	Topic	Laboratory
1	3.5	Laboratory policies and Procedures Course Overview Objectives of Polishing Effects of Polishing on Tooth Structure Use of Mirror and Explorer Porte Polishing vs. Engine Polishing	Lab practicum: use of mirror, explorer fulcrum and porte polisher on manikin. (Hours: 3.5) Skills exercizes

Period	Hours	Topic	Laboratory
2	3.5	Quiz #1 in Polishing Cleansing and Polishing Agents 1. Definitions a. abrasive b. abrasion c. polishing 2. Factors Affecting Abrasive Action a. characteristics of abrasive particles 1) shape 2) hardness 3) body strength 4) attrition resistance 5) particle size b. method of application of abrasives 1) quantity applied 2) speed of application 3) presure of application c. techniques of floss and tape 3. Abrasive agents a. Silex b. Pumice c. Zirconium Silicate d. Zinc Oxide	Lab practicum: use of mirror, explorer and porte polisher on manikin. (Hours: 3.5) Videotape Polishing Procedures
3	3.5	Quiz #2 (Polishing Procedures) Factors to Teach Patients 1. Plaque control to retain polishing effect 2. Indiscriminate use of abrasives 3. Sequences of polishing	Lab practice on manikin motor driven instruments: prophy angle with rubber cup/brush use of fulcrum use of mirror. (Hours: 3.5)

Period	Hours	Topic	Laboratory
4	3.5	Quiz #3 (Polishing) Use of bridge cleaners Care of Dental Appliances	Lab practice: polishing on lab partner in clinic. (Hours: 7)
5	3.5	Dental Impressions I. Clinical Procedures a. Assemble material and equipment 2. Prepare Patient a. explain procedure b. drape c. inspect oral cavity d. free mouth of debris e. dry teeth f. prevention of gogging 3. Impression Techniques a. maxillary b. mandibular	Lab practice taking of impression on lab partner. Wax bite. (Hours: 3.5)
6		Quiz #4 (Impression Making)	Lab practice: polishing on lab partner in clinic and impression making. (Hours: 7)
7	3.5	Fluorides Fluoride ion-action Fluoride application 1. Principles of application a. preparation of teeth b. teeth c. isolation d. clock timing e. patient instructions 2. Armamentarium	Lab practice: application of fluoride on lab partner. (Hours: 3.5)

Period	Hours	Topic	Laboratory
8	3.5	Quiz #5 & 6 (Fluorides) Detection of Pit and Fissure caries Application of Sealant	Lab practice: application of sealant on manikin tooth. (Hours: 3.5)
		1. clean tooth surface 2. isolate the tooth 3. dry the tooth 4. apply conditioner 5. rinse thoroughly 6. dry again 7. apply sealant 8. apply U.V. light 9. rinse	
		Factors which influence retention time.	
		Factors to teach a patient.	
9	3.5	Quiz #7 &8 (Sealants)	
		Care of Hypersensitive Teeth Factors contributing to hypersensitivity	
		1. Exposure of cementum and dentin	Lab practicum: desensitizing technique on manikin. Polishing lab partner. (Hours: 3.5)
		Method for Desensitization	
		1. self care	
		a. plaque control b. dentrifice c. self applied fluoride d. diet	
		Professional applications:	
		Procedures	

Period	Hours	Topic	Laboratory
10		Quiz #9 (Hypersensitivity)	
		Suture removal Suturing techniques 1. interrupted sutures 2. continuous sutures Procedure for removal 1. armentarium 2. patient examination 3. preparation of patient 4. retraction 5. steps for removal 6. precautions	Lab practice: 1. taking impression on clinic patient 2. wax bite 3. polishing of teeth on clinic patient 4. toothbrush instruction (Hours: 5)
11		Quiz #10 (Suture Removal) Practical Evaluation	Lab practice: 1. tooth brush instruction 2. polishing and fluoride on patient in clinic (Hours: 3.5)
		Practical Evaluation	Lab practice: 1. tooth brush instruction 2. polishing and fluoride on patient in clinic (Hours: 3.5)
12		Practical Evaluation	Lab practice: 1. tooth brush instruction for plaque removal 2. polishing and fluoride on patients in clinic (Hours: 3.5)

IX. Evaluation and Grading Criteria

Minimal acceptable performance levels will be required for several tasks to successfully complete the Preventive Dentistry experiences. The tasks to be evaluated are the following:

I. Plaque Removal

In education of patient 100%.

II. Polishing

According to classification

III. Fluoride

Dry field, proper time exposure, patient instructions 100%.

IV. Impression Making - 70% of the time they perform it will have to be according to the following:

Be able to select proper size tray, mix impression materials to proper consistency. The completed impressions should contain adequate borders and be free of air bubbles.

There will be 10 written quizzes, 15 minutes each worth 10 points each for a total of 100 points, 75% minimal mastery on each quiz.

Plaque Removal Techniques

	Proper	Improper
a. Patient Use Toothbrush		
Floss		
Other aid		

b. Student Use

	Proper	Improper
Toothbrush		
Floss		
Other Aid		

Polishing and fluoride

a. Polishing

	Completely removed	Incompletely removed
Plaque		
Stain		
Gingival Tissues	Trauma	Non-trauma

b. Fluoride

	Satisfactory	Unsatisfactory
Dry field		
Adequate Time		
Patient instructions		

X. Teaching Methods:

Lectures, lab practice, clinical practice.

XI. Media

Manikins
Chalkboard
Lab partner
Clinic patient
Video - slides - overhead transparencies

XII. Textbook: None

XIII. References:

Current dental literature including dental journals.

Developed by: Mrs. Josephine Rosa
February/79

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Feb. 15/79

EEK	HRS.	COURSE	TOPICS		
			PERIOD 1	PERIOD 2	PERIOD 3
	3	Preventive Dentistry I	Preventive Concepts Define Primary Levels of Prev. in Oral Diag.	Preventive Concepts Define Secondary	Tooth Deposits Plaque Soft Deposits - etiology comp.
	3.5	Expanded Function in Prev. Dentistry	Lab. Polish and Procedures Course Overview Objective of Polish	Effects of Polish on tooth structure. Use of mirror and explorer.	Porte polisher vs engine polisher
	3		Plaque removal Relation to caries and Perio.	Hard Deposits, calculus Define characteristics, form.	Stains, types, characteristic
	3.5		Cleansing and Polish agents Define, factors affecting abrasive action	Abrasive agents	Method of application of abrasion
			Stains - continued Removal	Plaque control Produces, disclose, plaque index	Plaque control Produces, disclose, plaque index
			Polishing Procedures	Plaque control to retain polishing effect	Sequence of Polishing Use of bridge cleaners
			Toothbrushing Methods	Tooth brushing methods	Interdental plaque control
			Lab/clinic Polishing	Lab/clinic	Lab/clinic
			Interdental plaque control	Communication skills in Preventive Dentistry	Communication skills in Preventive Dentistry
			Dental Impressions Clinical Procedures	Preparation of Patient	Impression techniques
			Application of Communication skills, Role play	Tooth paste and mouth wash	Fluorides - Introduction Fluoridation systemic fluorosi
			Lab/clinic complete polishing and impression making	Lab/clinic	Lab/clinic

EEK	HRS.	COURSE	TOPICS		
			PERIOD I	PERIOD 2	PERIOD 3
		Preventive Dentistry I	Fluorides - continuation Topical, types	Fluorides - continuation Topical, types	Sealants: define, indications contraindications
		Expanded Functions Prev. Dentistry	Fluorides Topical application	Principles of application armentarium	Lab/clinic Application of topical fluorid
			Sealants - continuation mechanism of action, relationship to other Prev. measures		Dental caries: Theories Race of plaque
			Sealants - Detection of pit and fissure sealants	Application of sealants	Factors which influence retention time Factors to teach patient
			Dental caries continuation	types, location, progression	Periodontal Disease define - perio tissues
			Care of Hypersensitive teeth contributing factors exp cementum and dentin	Methods for desensitizing self care	Profession applications procedures
			Periodontal disease, etiology relation to plaque and calculus	Periodontal disease pocket formation	Nutrition as primary Preventive Measure
			Suture removal Techniques Procedures for removal	Clinic Patient impression and wax bite practical	Clinic patient
			Nutrition - continuation P.R. diet	Nutrition - cariogenic of food staffs	Diet analysis, cho-intake re: to caries
			Clinic patient Practical	Clinic patient - polishing and application, Oral Helth Ed.	Clinic patient incl. (sugar intake diary)
			Diet analysis (problem solving)	Final Exam	Final Exam
			Clinic patient practical	clinic patient	clinic patient

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

COURSE:

I. Title: Clinical Rotation I-A

II. Number: ADHP 020

III. Credit Hours: 12

IV. Clock Hours: 300

V. Methodology: Clinical

VI. Description:

The dental assisting student is provided with the practical clinical experiences related to chairside assisting in the general main clinic, oral surgery clinic, and dental auxiliary utilization (DAUP) clinic. The student is also provided with the clinical experiences necessary for exposing and processing intra-oral radiograph. Emphasis will be placed on patient management in order to ease performance by better patient-operator relations.

VII. Objectives:

A. General

To develop the necessary skills for successful performance as a chairside assistant in the various types of dental clinics such as, DAUP, Orthodontics, Oral Surgery, Endodontics, Periodontics, Prosthodontics, Restorative, Pedodontics, and Radiology.

B. Operational

During the clinical experience the student will:

1. evacuate adequately the oral cavity during dental procedures by:

   - a. adequate grasping of evacuation tip
   - b. correct positioning of tip according to surface and quadrant
   - c. non-interference with dentist procedure
   - d. proper retraction
   - e. proper utilization of saliva ejector
   - f. constantly maintaining dry and clean area
   - g. proper gauze application

2. assist properly with rubber dam insertion and removal by
   - a. setting proper instrumentation.
     - 1) completeness
     - 2) sequence
   - b. correct instrument transfer
   - c. adequate clamp selection and transfer
   - d. correct use of floss interproximally
   - e. correct use of air to invaginate rubber dam
   - f. correct and prompt placement of saliva ejector
   - g. appropriate removal of rubber dam
3. maintain a clear field by correct use of
   - a. air and water syringe
   - b. proper cheek retraction
4. assist properly with the administration of local anesthetics by
   - a. preparing an adequate set up
   - b. proper placement of needle and syringe
   - c. proper instrument transfer
5. assist properly during the examination procedure by
   - a. proper charting of oral conditions as dictated
   - b. properly obtaining and recording of the medical, dental and personal history

   c. proper manipulation of armamentarium for obtaining vital signs and proper recording of them

6. assist properly in managing the patient by
   a. correctly positioning and draping of the patient in the cha
   b. proper manipulating of the dental unit
   c. being sensitive to patient's comfort
   d. being courteous and communicating effectively with patient.

7. utilize adequate asepsis procedures
   a. personal
   b. instruments
   c. area

8. transfer adequately the instruments by
   a. setting the proper instrumentation needed
   b. adequate patient, operator, and dental assistant position
   c. proper positioning of mobile cabinet
   d. correct instrument grasp
   e. proper deliver and receipt of instruments
   f. handling instruments in advance
   g. achieving smoothness in transfer of instrument

9. assist properly in restorative procedures by
   a. setting up the proper instrumentation as needed
   b. having equipment and material on hand
   c. correct manipulation of dental materials needed
   d. proper instrument transfer using four handed dentistry
   e. maintaining clean area

   Additional criteria for CL II Amalgam
   a. correctly place band in matrix retainer

10. assist properly in endodontics procedures by
    a. setting the proper instrumentation needed
    b. having needed equipment and material on hand
    c. correct manipulation of dental materials
    d. proper instrument transfer
    e. taking, exposing and mounting radiographs correctly

11. assist adequately in Prosthodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand
    c. correct manipulation of dental materials
    d. adequate construction of bite rims
    e. adequate construction of individual trays for dentulous and edentulous cases
    f. pouring impressions adequately
    g. adequate trimming of the models
12. assist adequately in Periodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand
    c. correct manipulation of dental materials
    d. proper instruments' transfer
    e. helping properly in the placing and removal of periodontal dressings
    f. helping properly in the placing and removal of sutures
13. assist adequately in Pedodontics by
    a. proper patient management
    b. setting the proper instrumentation needed
    c. having needed equipment and materials on hand
    d. correct manipulation of dental materials.

  e. teach tooth brush and flossing techniques for plaque remov
  f. proper instrument transfer
  g. adequately helping in the placement of stainless steel crowns.
  h. adequately helping in the different pulpal procedures

14. assist adequately in Oral Surgery by
  a. setting the proper instrumentation needed
  b. having needed equipment and materials on hand
  c. correct manipulation of dental materials
  d. proper instrument transfer
  e. helping properly in the placing and removal of sutures

15. assist adequately in Orthodontics by
  a. setting the proper instrumentation needed
  b. having needed equipment and materials on hand
  c. correct manipulation of dental materials
  d. adequate trimming of models

16. apply the basic principles of radiology when exposing dental film in the clinic.

17. protect her patient and herself when exposing dental film in the clinic by utilizing all safety measures available.

18. position patient, x-ray film and x-ray machine correctly for taking radiographs in the clinic using the bisecting and the paralleling techniques.

19. demonstrate darkroom procedures when developing radiographs by utilizing care in maintaining correct temperature and time.

20. demonstrate ability in clinic to deal with patients who tend to gag by utilizing methods available to decrease the gag reflex.

21. demonstrate ability in clinic to cope successfully with the child patient and the adult apprehensive patient.

22. evaluate the completed radiographs taken on a patient in clinic to determine the level of acceptability by applying criteria from radiograph evaluation forms.

VIII. Course Outline and Schedule of Instruction

(Refer to Clinical Schedule)

IX. Media:

Clinical facilities, participation of dental students, and patients.

X. Evaluation:

Each student will have experiences in each of the different clinics and specialties, requiring, achieving a minimal mastery level of 80%.

Students' evaluation of clinical performance will be performed daily using attached clinical evaluation form.

Each student will expose and process a total of 6 full mouth series consisting of the following:

1 pedodontic tray series
1 mixed dentition tray series
1 edentulous tray series
3 regular patient full series

The finished radiographic series will be evaluated according to the criteria specified in the evaluation form appended.

Students must attain a minimal mastery level of 75% on each full series with no more than 4 retakes allowed.

Hour allocation for assisting in the various specialty areas:

Clinic I	Hours
Orthodontic	15
Oral Surgery	33
Endodontic	18
Periodontics	30
Prosthodontic	15
Restorative	94.5
Pedodontic (including DAU) and TEAM	58.5
X-Rays	36
	300.00

rls

Developed by Dr. Iris R. de Pérez

Revised by Chairside Assisting Staff, 1978

IVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS UPR RCM G.P.O. BOX 5067 SAN JUAN, PUERTO RICO 00936 — TEL. 767-9626

COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

COURSE:

I. Title: Clinical Rotation I-b

II. Number: PAXD 047

III. Credit Hours: 5

IV. Clock Hours: 132

V. Methodology: Clinical

VI. Description:

The dental auxiliary student is provided with the practical clinical experiences related to chairside assisting in the general main clinic, oral surgery, pedodontic and orthodontic clinics. The student is also provided with the clinical experiences necessary for exposing and processing intraoral radiographs. Emphasis will be placed on patient management in order to ease performance by better patient-operator relations.

VII. Objectives

A. General

To develop the necessary skills for successful performance as a chairside assistant in the various types of dental clinics such as: Orthodontics, Oral Surgery, Endodontics, Periodontics, Prosthodontics, Pedodontics, and Radiology.

B. Operational

During the clinical experience the student will:

1. evacuate adequately the oral cavity during dental procedures by:

   - a. adequate grasping of evacuation tip
   - b. correct positioning of tip according to surface and quadrant
   - c. non-interference with dentist procedure
   - d. proper retraction
   - e. proper utilization of saliva ejector
   - f. constantly maintaining dry and clean area
   - g. proper gauze application

2. assist properly with rubber dam insertion and removal by
   - a. setting proper instrumentation
      - 1) completeness
      - 2) sequence
   - b. correct instrument transfer
   - c. adequate clamp selection and transfer
   - d. correct use of floss interproximally
   - e. correct use of air to invaginate rubber dam
   - f. correct and prompt placement of saliva ejector
   - g. appropriate removal of rubber dam
3. Maintain a clear field by correct use of
   - a. air and water syringe
   - b. proper cheek retraction
4. assist properly with the administration of local anesthetics by
   - a. preparing an adequate set up
   - b. proper placement of needle and syringe
   - c. proper instrument transfer
5. assist properly during the examination procedure by
   - a. proper charting of oral conditions as dictated
   - b. properly obtaining and recording of the medical, dental and personal history

    c. proper manipulation of armamentarium for obtaining vital signs and proper recording of them

6. assist properly in managing the patient by
    a. correctly positioning and draping of the patient in the chair
    b. proper manipulating of the dental unit
    c. being sensitive to patient's comfort
    d. being courteous and communicating effectively with patient.
7. utilize adequate asepsis procedures
    a. personal
    b. instruments
    c. area
8. transfer adequately the instruments by
    a. setting the proper instrumentation needed
    b. adequate patient, operator, and dental assistant position
    c. proper positioning of mobile cabinet
    d. correct instrument grasp
    e. proper delivery and receipt of instruments
    f. handling instruments in advance
    g. achieving smoothness in transfer of instrument
9. assist properly in endodontics procedures by
    a. setting the proper instrumentation needed
    b. having needed equipment and material on hand
    c. correct manipulation of dental materials
    d. proper instrument transfer
    e. taking, exposing and mounting radiographs correctly
10. assist adequately in Prosthodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand

  - c. correct manipulation of dental materials
  - d. adequate construction of bite rims
  - e. adequate construction of individual trays for dentulous and edentulous cases
  - f. pouring impressions adequately
  - g. adequate trimming of the models

11. assist adequately in Periodontics by
    - a. setting the proper instrumentation needed
    - b. having needed equipment and materials on hand
    - c. correct manipulation of dental materials
    - d. proper instruments' transfer
    - e. helping properly in the placing and removal of periodontal dressings
    - f. helping properly in the placing and removal of sutures
12. assist adequately in Pedodontics by
    - a. proper patient management
    - b. setting the proper instrumentation needed
    - c. having needed equipment and materials on hand
    - d. correct manipulation of dental materials
    - e. proper instrument transfer
    - f. adequately helping in the placement of stainless steel crowns
    - g. adequately helping in the different pulpal procedures
13. assist adequately in Oral Surgery by
    - a. setting the proper instrumentation needed
    - b. having needed equipment and materials on hand
    - c. correct manipulation of dental materials
    - d. proper instrument transfer
    - e. helping properly in the placing and removal of sutures

14. assist adequately in Orthodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand
    c. correct manipulation of dental materials
    d. adequate trimming of models
15. apply the basic principles of radiology when exposing dental film in the clinic.
16. protect her patient and herself when exposing dental film in the clinic by utilizing all safety measures available.
17. position patient, x-ray film and x-ray machine correctly for taking radiographs in the clinic using the bisecting and the paralleling techniques.
18. demonstrate darkroom procedures when developing radiographs by utilizing care in maintaining correct temperature and time.
19. demonstrate ability in clinic to deal with patients who tend to gag by utilizing methods available to decrease the gag reflex.
20. demonstrate ability in clinic to cope successfully with the child patient and the adult apprehensive patient.
21. evaluate the completed radiographs taken on a patient in clinic to determine the level of acceptability by applying criteria from radiograph evaluation forms.

VIII. Course Outline and Schedule of Instruction

(Refer to Clinical Schedule)

IX. **Media:**

Clinical facilities, participation of dental students, and patients.

X. **Evaluation:**

Each student will have experiences in each of the different clinics and specialties, requiring, achieving a minimal mastery level of 80%.

Students' evaluation of clinical performance will be performed daily using attached clinical evaluation form.

Each student will expose and process a total of 6 full mouth series, at least 3 of them during the second trimester.

The finished radiographic series will be evaluated according to the criteria specified in the evaluation form appended.

Students must attain a minimal mastery level of 75% on each full series with no more than 4 retakes allowed.

Hour allocation for assisting in the various specialty areas:

Clinic I	Hours
Orthodontic	18
Oral Surgery	34
Endodontic	22
Periodontics	30
Prosthodontic	18
Crown and Bridge	26
Pedodontic (including DAU)	26
Radiology	42
	216

This course will start in the second trimester for Track B students and will receive an "in progress" grade at the end of the second trimester. The final grade for the course will be given at the end of the third trimester when the radiology requirements will be completed.

Developed by Dr. Iris R. de Pérez

Revised by Chairside Assisting Staff, 1978

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Seminar I
II. Course Number: PAXD 017
III. Credit Hours: 1
IV. Clock Hours: 12
V. Methodology: discussion
VI. Description:

Time will be devoted to discussion of any problem which may arise during the clinical experiences in the assigned clinics. Emphasis will be placed on the sharing of clinical experiences in order to enhance the clinical exposure of each student.

VII. Objectives

A. General

Acquire further experience in problem-solving situations related to their clinical experiences.

B. Operational

During these seminar sessions the student will:

1. demonstrate ability to problem-solve by verbalizing possible solutions to problems presented in class.
2. relate to classmates, a clinical experience that may have posed an unusual situation.

VIII. Evaluation

Pass or fail - based on attendance and participation.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Number PAXD 011 Title: Head and Neck Anatomy

II. Credit Hours: 1 Prerequisite: Dental Anatomy

III. Clock Hours: 12

IV. Description

Students will be introduced to a general study of the anatomy of the head and neck, with special emphasis of the oral cavity, and anatomical and functional aspects of the head and neck structures as related to dentistry and to the dental auxiliaries work.

V. Objectives

A. General

Impart a comprehensive knowledge about anatomical structures of the head and neck as these relate to dentistry, in general, and specifically, in dental assisting.

B. Operational

T 1. Discuss the anatomy of the temporal mandibular joint and its function

E 1. Define the differents types of articulations

E 2. List the structures that compose the temporal mandibular articulation.

T 2. Describe the structures that compose the oral cavity and their functions

E 1. Name the boundaries of the oral cavity

E 2. Discuss the palate, tongue, pharynx, larynx, and related structures

E 3. Express the importance of these structures to dentistry

T 3. Explain the functions of the salivary glands

E 1. Name the major and minor salivary glands and their functions.

T 4. Recognize the functions of the muscles of mastication and facial expressions

E 1. Name the muscles of mastication with their functions

E 2. Define the muscles of facial expressions with their functions.

T 5. Describe the nasal and paranasal sinuses and its importance to dentistry

E 1. Discuss the function of the sinuses

E 2. Relate the location of the sinuses to the oral cavity

T 6. Express the importance of the trigeminal and facial nerves to the oral apparatus

E 1. Discuss the general function of the peripheral nerves

E 2. Explain the structures that are inverted by the trigeminal and facial nerves

E 3. Name the twelve cranial nerves and their functions

T 7. Describe the main structures of the neck

E 1. Define the function of the hyoid bone and its function

E 2. List the main blood vessels that are included in the neck structures.

E 3. Identify the main muscles that are in the neck

E 4. Relate the area of the vertical column included in the neck

C. Evaluation Method and Grading Criteria

Daily lecture quizzes (5 quizzes of 20 points) (total 100 points), two partial written examinations-- 100 points each, and one at the end of the course (100 points), total 400 points.

Minimum mastery level of 80% is required.

VI. Course outline and schedule of instruction

A. Course Outline

1. Introduction and course overview
2. The temporo mandibular joint
    a. the mandible
    b. related information about joints
    c. anatomy of the T.M.J.
        1. articulative surfaces
        2. capsule and disk
        3. ligaments
    d. functional aspects of the T.M.J.
3. The oral cavity
    a. boundaries
    b. the palate
    c. the tongue
    d. pharynx and larynx and related structures
    e. importance of these structures to dentistry
4. The salivary glands
    a. related information about glands
    b. major salivary glands and their ducts
    c. minor salivary glands
5. Muscles of the face
    a. related information about functions of the muscles of mastication and facial expressions
    b. temporalis
    c. masseter
    d. internal pterygoid
    e. external pterygoid

   f. accesory muscles of mastication

6. Nasal and paranasal sinuses
   a. location
   b. function of sinuses
   c. the maxillary sinus and its importance to dentistry

7. The trigeminal and facial nerves
   a. general functions of peripheral nerves
   b. the twelve cranial nerves and their functions
   c. divisions and areas of innervation of the trigeminal and facial nerves and their relevance to dentistry.

8. Relation of blood supply, lymphatic system and transmission of disease to body

B. Schedule of Instructional Periods

Period	Hours	Topic
I	1	Introduction: Course Overview
II	1	The Temporal mandibular joint
III	1	Quiz The oral cavity
IV	1	Quiz The salivary glands
V.	1	Partial Examination
VI	1	Quiz The muscles of mastication
VII	1	Quiz Nasal and paranasal sinuses
VIII	2	The trigeminal and facial nerves
IX	1	Partial Examination
X	1	The neck
XI	1	Review
XII	1	Final Examination

VII. Teaching Methods

Lecture and discussion

VIII. Media

Slides, pictures, diagrams, videotapes

IX. Textbook

Reed and Sheppard, Basic Structures of the Head and Neck

X. References

Wernet, Head Anatomy Pertinent to Dentistry

rls

Developed by Dr. Jose Orlando Rojas

February, 1979

I. Title: Pathology and Therapeutics

II. Course Number: PAXD 016

III. Credit Hours: 2

IV. Clock Hours: 24

V. Methodology: Lecture, conference, group discussion
independent study, case study

VI. Description:

Introduction to basic concepts in general and oral pathology and the most common therapeutic measures applicable within the scope of the dental office.

VII. Objectives

A. General

To acquaint students with the basic signs and symptoms of oral disease and its manifestations in the human body.

B. Operational

1. Discuss the different causes and mechanisms of disease.
2. Describe the basic responses of the body to irritation.
3. Differentiate among the different developmental disturbances of the face, jaws, and teeth.
4. Compare clinically and radiographically the periapical abscess, cyst and granuloma.
5. Discuss the effects of nutritional deficiencies of basic foods and vitamins.
6. Describe the most common benign and malignant neoplasia.
7. Select the correct neoplasm from case presentations.
8. Explain the different components of a prescription.

9. Explain the use of different therapeutic agents.
10. Select the appropriate therapeutic agent given a case report.
11. Utilize the Physicians' Desk Reference to find information concerning the different therapeutic agents.
12. Distinguish between normal and allergic reactions.
13. Indicate therapeutic measures in allergic reactions.

VIII. Course Outline and Schedule of Instructional Periods

A. Course Outline

1. Introduction to the course
    a. definition
    b. course objectives
2. Causes and mechanisms of disease
    a. intrinsic
    b. extrinsic
    c. developmental
3. Body response to irritation
    a. acute inflammation
        1) definition
        2) signs and symptoms
    b. chronic inflammation
        1) definition
        2) cellular response
    c. hyperplasia
    d. hypertrophy
    e. repair

1) granulatiar tissue
2) dense connective tissue
3) scar tissue

4. Developmental disturbances
   a. stages of facial development
   b. disturbances of the upper face
   c. disturbances of the tongue
      1) median rhomboid glossitis
      2) bifid tongue
      3) hairy tongue
      4) glographic tongue
      5) fissured tongue
      6) ankyloglossia
   d. disturbances of the jaws
   e. disturbances in the teeth
      1) anodontia
      2) impacted
      3) dilaceration
      4) dens in dents
      5) gigantism
      6) dwarfism
      7) peg. lateral
      8) supernumerary
      9) amelogenesis imperfecta
      10) enamel hypoplasia
      11) Hutchinson incisor
      12) mulbery molar
      13) mottled enamel

14) dentinogenesis imperfecta

15) concrescence

16) enamel pearls

17) gemination

V. Diseases of the pulp and periapical tissues

a. acute periapical abscess

b. dental granuloma

c. periapical cyst

VI. Nutritional disturbance

a. Deficiencies of basic foods

1) carbohydrate

a) diabetes

(1) insulin shock

(2) diabetic coma

(3) oral manifestations

2) Fats

3) Proteins

b. Deficiencies of vitamins

1) Vitamin A

2) Vitamin B complex

3) Vitamin C

4) Vitamin D

5) Vitamin E

6) Vitamin K

VII. Neoplasia
  a. definition
  b. classification
    1) benign
      a) papilloma
      b) adenoma
      c) fibroma
      d) hemangioma
      e) nevus
      f) composite odontoma
    2) malignant
      a) squamosis cell carcinoma
      b) basal cell carcinoma
      c) adenocarcinoma
      d) leukemia

VIII. Prescription writing
  a. parts
  b. importance
  c. common abbreviations

IX. Therapeutic agents
  a. anti inflamatory
    1) definition
    2) therapeutic measures
    3) case application
  b. anti infection (antibiotics)
    1) definition
    2) types
    3) usage
    4) dosage

c. analgesics and sedatives
  1) types
  2) effect
  3) response
  4) indications
  5) dosage

d. general and local anesthetics

e. use of Physicians Desk Reference (P.D.R.)

X. Allergic Reactions

a. recognition of allergic reactions

b. systemic relation to drugs

c. usual therapeutic measures

B. Schedule of instructional periods

Period	Hours	Topic
1	2	Introduction to the course and goal orientation. Causes and mechanisms of disease.
2	2	Body response to irritation.
3, 4, 5	6	Developmental disturbances.
6	2	Diseases of the pulp and periapical tissues.
7,8	4	Nutritional disturbances.
9	2	Neoplasia
10	2	Prescription writing and therapeutic agents.
11	2	Therapeutic agents and allergic reactions.
12	2	Final examination.

IX. Media

Overhead projections, slide presentations.

X. Evaluation

Nine quizzes totaling 100 points and a final examination totalling 200 points.

XI. Pre-requisite courses

Microbiology, Dental Anatomy, Human Biology.

XII. Textbook

Ken, Ash, Oral Pathology, Lea and Febiger, 4th Edition.

XIII. References

Synopsis of Oral Pathology - Bashkar, latest edition.

Developed by Dr. Víctor Fernández
February, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title : Expanded Functions in Restorative Dentistry Clinic
II. Number : PAXD 030
III. Credit Hours : 5
IV. Methodology : Clinical
V. Description :

A general exposure to programmed progressive experiences in the execution of the most common restorative operative procedures in order to develop skills and proficiency in this field, utilizing four handed dentistry concepts.

VI. Objectives:

A. General

This course is designed to expose the dental auxiliary to programmed progressive experiences in the execution of the most common restorative operative procedures in order to develop skills and proficiency in this field. Four handed dentistry concepts are emphasized.

B. Operational:

1. Insert and remove a minimum of twenty rubber dams in patient, at least ten of them should meet the following minimum criteria:

a. Correct clamp (molar, bicuspid or anterior) is used and place.

b. Clamp is placed to provide acess to preparation.

c. Dam is punched for the appropriate quadrante

d. Key punch hole is correctly placed

e. Correct spacing and position of holes

f. Punch holes fit tightly around each tooth to prevent leakage.

g. Nose is not covered

h. Clamp is seated below the height of contour of anchor tooth

i. Clamp jaw tip are all in contact with the C.E.J. of the tooth

j. Clamp not easily dislodged by finger pressure.

k. Ligature correctly placed

l. Ligature is attached to bow of clamp it is outside of dam

m. No trauma to hard of soft tissue occured.

n. Interseptal rubber is passed through all contact are without evidence of brushing or tearing.

o. Frame is mounted properly and positioned squarely on the face

p. Dam is stretched taut on frame

q. Dam is inverted into the gingival crevice of each tooth.

2. Manipulate Zinc Oxide and Zinc Phosphate to be used as a temporary restoration in five patients, at least three of them should meet the following minimum criteria.
    a. No excess
    b. No open margins
    c. No ledges or voids present
    d. Tooth surface and cement are flush along margins
    e. Major features of original are reproduced
    f. Restoration is out of occlusion, no marks in the occlusal surface formed.
3. Manipulate Zinc Oxide eugenol and Zinc Phosphate to be used as an intermediary base in ten patients, at least five of them should meet the following criteria:
    a. Ideal depth (O.5 mm in D.E.J.)
    b. Is smooth
    c. Is not on margins or retentive areas
    d. Base material cannot be easily dislodged with explorer.

4. Apply Calcium Hydroxide to a prepared cavity at least ten of them should follow the minimum criteria.
    - a. Dentine walls have a thin film of liner.
    - b. Toner is continuous without voids or rough surface.
    - c. Must not cover areas of retention.
    - d. Enamel walls and cavosurface margins are free of liner.
    - e. Must cover areas of greater than ideal depth.
    - f. Liner cannot be dislodged with the explorer.
5. Place, carve and finish a minimum of 10 Class I amalgam restorations meeting the following criteria:
    - a. Apply two coats of cavity varnish
    - b. Inject amalgam, then condensing, until cavity preparation is partially overfilled or covering the cavosurface margin (by approximately 0.5 mm)
    - c. While carving tooth surface and amalgam are flush along the cavosurface margins
    - d. Functional occlusal anatomy is reproduced
    - e. Restoration closely approximate to the original occlusal anatomy of the tooth
    - f. Restoration is contoured

g. Amalgam surface is without pit or voids and have a dull luster indicating appropriate handling of material.

h. Amalgam margin is continuous with cavosurface of tooth

i. No voids exists at cavosurface margins

j. Occlusal contacts established

k. No prematurities exist in intercuspated positions or excentric movements

6. Place, carve and finish a minimum of 10 Class II amalgam restoration meeting the following criteria:

   a. Steps in placement and condensation as in Class I with additional steps

      1) Band loop contour and adjusted

      2) Band tightened

      3) Retainer is adjacent to facial surfaces and parallel with the reclusal surfaces of the teeth.

      4) Slots of the head, sliding body and smaller circumferenced loop of band face gingiva.

      5) Band creates a natural tooth contour.

6) Band is 0.5 mm to 1 mm gingival to the gingival margin of the cavity preparation and secure against the proximal surface

7) Band is 0.5 mm to 1 mm occlusal to the proximal marginal ridge

8) Band and retainer are securely in place when checked by finger pressure

9) Band does not trap the rubber dam or gingiva

10) Base of wedge is against gingiva and extended only to gingival margin. No more than 4 - 5 mm beyond the facial and lingual surfaces when viewed from the occlusal

11) Condensed amalgam is 1 ,, higher than the marginal ridge of the adjacent tooth and no more than 0.5 mm below the top of the matrix band.

12) Proximal contact is reestablished

13) Excess amalgam is removed from matrix-amalgam interfase by using an explorer

14) The retainer is loose and removed first, then the matrix surface.

15) Tooth surface and amalgam are flush along the cavosurface margins

16) Marginal ridge and contact areas are undamaged by removal of the mechanical retainer and matrix band.

17) Functional occlusal anatomy is reproduced.

7. Place, carve, and finish a minimum of three Class V and four Class I (with lingual or buccal step) amalgam restoration meeting the following criteria:

   a. Apply two coats of cavity varnish

   b. Once condensation is completed, the amalgam must cover the cavosurface margins by approximately 0.5 mm

   c. Tooth surface and amalgam are flush along the cavosurface margins

   d. Restoration closely approximates the original facial anatomy

   e. Contour of the finished restoration should be convex

   f. Amalgam surface is without pit or voids

   g. Amalgam has a dull luster indicating appropriate handling of material

   h. Amalgam margins is continuous with cavosurface of tooth

- i. No restorative material extends beyond the cavosurface margin

8. Place and finish ten (10) composite resins restorations including Class III, IV and V meeting the following minimum criteria:
    - a. Incisal edge of wedge is at or slightly gingival to the cavity preparation; width portion is located gingival to gingival floor.
    - b. Wedge is stable, resist removal and separate teeth.
    - c. Wedge adapt band to proximal surface to tooth below gingival wall as determined visually and by explorer
    - d. Resin feels hard when touched with explorer
    - e. When placed a slight overfilled over margins occur.
    - f. Minimal excess
    - g. Proximal contour approximates the original contour of the tooth
    - h. Resin surface is free of voids
    - i. Contact is maintained
    - j. Surface of the restoration has a homogenous or translucent appearance

k. Restoration is smooth, without visible scratches

l. Restoration reproduces the original contour of the tooth

m. Tooth surface and restoration are flush along margins

n. Tooth structure adjacent to the restoration is undamaged

o. Excellent match

p. Exthetically pleasing shade.

q. Homogenous texture and color

r. No stains

s. Contour is restored, contact is maintained

t. Composite margin is continuous with cavosurface of tooth

u. No white line along the margins from calcium hydroxide liner

v. No voids, roughness or catches

w. No prematurities exist in centric or excentric movements

VII. Evaluation

The clinical performance will be evaluated on a scale of 5-0 using the evaluation criteria handed out to students. A daily evaluation sheet will be used.

5: All criteria are acceptable

4: Not more than one criteria is unacceptable for procedures having (4) criteria. For those having eight (8) criteria not more than two (2) criteria are unacceptable.

3: Not more than two (2) criteria are unacceptable for procedures having four (4) criteria. For those having eight (8) criteria, not four (4) are unacceptable.

2: Not more than three (3) criteria are unacceptable in procedures having four (4) criteria. For those having eight (8) criteria, not more than six (6) criteria are unacceptable.

1: Four (4) criteria are unacceptable for procedures having four criteria. For those having eight (8) criteria, eight (8) criteria are unacceptable.

0: Not observed

* Evaluative criteria for each procedure appended

* Minimum mastery level is four (4) for any procedure. Although procedure at the level of three are clinically acceptable it does not count as part of the completed requirements but as a clinical experience and student will receive a grade for record purposes and final notes.

VIII. Course Outline and Schedule of Instruction

(refer to clinical schedule)

IX. Teaching methods

Clinical experiences and live demonstrations when needed.

X. Media

Clinical facilities and patients

XI. Prerequisite Courses

All courses in 1st and 2nd trimester and those concurrently in 3rd trimester.

XII. References

1. Chasteen, Joseph E., Essentials of Clinical Dental Assisting.
2. Simon/Clinical Dental Assisting, Harper & Row.
3. Castaño-Alden, Handbook of Dental Auxiliary Practice.

Developed by: Dr. Angel R. Aja
February/1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

Course

I. Title: Seminar II

II. Number: PAXD 018

III. Credit Hours: 1

IV. Clock Hours: 12

V. Methodology: Discussion

VI. Description:

Time will be devoted to discussion of any problem which may arise during the clinical experiences in expanded functions in restorative and preventive. Emphasis will be placed on the sharing of clinical experiences in order to enhance the clinical exposure of each student.

VII. Objectives:

A. General

Acquire experience in problem-solving situations related to expanded functions in restorative and preventive.

B. Operational

During these seminar sessions the student will:

1. demonstrate ability to problem-solve by verbalizing possible solutions to problems presented in class.
2. relate to classmates, a clinical experience that may have posed an unusual situation.

VIII. Schedule of Instruction

(refer to class schedule)

IX. Evaluation

pass or fail - based on attendance and participation

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Prepared by Staff, 1978

D DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS G.P.O. BOX 5067 SAN JUAN, PUERTO RICO 00936 — TEL. 767-9626

COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

COURSE

I. Title: Clinical Rotation II

II. Number: PAXD 021

III. Credit Hours: 3

IV. Methodology: Clinical

V. Description:

A general exposition to programmed progressive experiences in the execution of chairside assisting in the most common restorative operative procedures in order to develop skills and proficiency in this field, utilizing four handed dentistry concepts.

VI. Objectives:

A. General:

Acquire experience in the field of four-handed dental assisting in order to develop skills and proficiency.

B. Operational:

During the clinical experiences the student will:

1. Assist in the insertion and removal of twenty rubber dams in patients.
2. Assist in the manipulation of zinc oxide eugenol and zinc phosphate to be used as a temporary restoration in five patients.
3. Assist in the manipulation of zinc oxide eugenol and zinc phosphate to be used as an intermediary base or as a cement in ten patients.

4. Assist in the placement and removal of matrices and wedges in patients.
5. Assist in the application of cavity varnish to a prepared cavity.
6. Assist in the application of calcium hydroxide to a prepared cavity.
7. Assist in the placement and condensation procedures of ten class I amalgam restorations.
8. Assist in the placement and condensation of a minimum of ten class II amalgam restorations.
9. Assist in the placement and condensation of a minimum of two class V and four class I (with lingual and buccal steps) amalgam restorations.
10. Assist in the placement and finishing of ten composite resin restorations to include class III, class IV and class V.

VII. Evaluation and grading criteria (same criteria applicable to functions in Expanded Functions in Restorative Dentistry Clinic. Assistant's role - see appended form.)

VIII. Course outline and schedule of instruction (Refer to clinical schedules)

IX. Teaching Methods:

Clinical experiences and live demonstrations, when needed.

X. Media:

Clinical facilities and patients.

XI. Prerequisite courses:

All courses in first and second trimester and those concurrently in third trimester.

XII. References:

1. Richardson, Richard E. and Barton, Roger E., The Dental Assistant, McGraw-Hill, 4th. edition

2. Park, Ashman, and Shelly, A Textbook for Dental Assistants, Saunders, 2nd. edition, Phila. 1975.
3. Chasteen, Joseph E., Essentials of Clinical Dental Assisting. Mosby, St. Louis, 1975.

Developed by Chairside Staff, 1978

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

COURSE:

I. Title: Clinical Rotation II-A

II. Number: PAXD 048

III. Credit Hours: 16

IV. Clock Hours: 396

V. Methodology: Clinical

VI. Description:

The dental assisting student is provided with the practical clinical experiences related to chairside assisting in the general main clinic, oral surgery clinic, and dental auxiliary utilization (DAUP) clinic. The student is also provided with the clinical experiences necessary for exposing and processing intra-oral radiograph. Emphasis will be placed on patient management in order to ease performance by better patient-operator relations.

VII. Objectives:

A. General

To develop the necessary skills for successful performance as a chairside assistant in the various types of dental clinics such as, DAUP, Orthodontics, Oral Surgery, Endodontics, Periodontics, Prosthodontics, Restorative, Pedodontics, and Radiology.

B. Operational

During the clinical experience the student will:

1. evacuate adequately the oral cavity during dental procedures by:

- a. adequate grasping of evacuation tip
- b. correct positioning of tip according to surface and quadrant
- c. non-interference with dentist procedure
- d. proper retraction
- e. proper utilization of saliva ejector
- f. constantly maintaining dry and clean area
- g. proper gauze application

2. assist properly with rubber dam insertion and removal by
   - a. setting proper instrumentation.
     - 1) completeness
     - 2) sequence
   - b. correct instrument transfer
   - c. adequate clamp selection and transfer
   - d. correct use of floss interproximally
   - e. correct use of air to invaginate rubber dam
   - f. correct and prompt placement of saliva ejector
   - g. appropriate removal of rubber dam
3. maintain a clear field by correct use of
   - a. air and water syringe
   - b. proper cheek retraction
4. assist properly with the administration of local anesthetics by
   - a. preparing an adequate set up
   - b. proper placement of needle and syringe
   - c. proper instrument transfer
5. assist properly during the examination procedure by
   - a. proper charting of oral conditions as dictated
   - b. properly obtaining and recording of the medical, dental and personal history

   c. proper manipulation of armamentarium for obtaining vital signs and proper recording of them

6. assist properly in managing the patient by
   a. correctly positioning and draping of the patient in the cha
   b. proper manipulating of the dental unit
   c. being sensitive to patient's comfort
   d. being courteous and communicating effectively with patient.
7. utilize adequate asepsis procedures
   a. personal .
   b. instruments
   c. area
8. transfer adequately the instruments by
   a. setting the proper instrumentation needed
   b. adequate patient, operator, and dental assistant position
   c. proper positioning of mobile cabinet
   d. correct instrument grasp
   e. proper deliver and receipt of instruments
   f. handling instruments in advance
   g. achieving smoothness in transfer of instrument
9. assist properly in restorative procedures by
   a. setting up the proper instrumentation as needed
   b. having equipment and material on hand
   c. correct manipulation of dental materials needed
   d. proper instrument transfer using four handed dentistry
   e. maintaining clean area

Additional criteria for CL II Amalgam

   a. correctly place band in matrix retainer

10. assist properly in endodontics procedures by
    a. setting the proper instrumentation needed
    b. having needed equipment and material on hand
    c. correct manipulation of dental materials
    d. proper instrument transfer
    e. taking, exposing and mounting radiographs correctly

11. assist adequately in Prosthodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand
    c. correct manipulation of dental materials
    d. adequate construction of bite rims
    e. adequate construction of individual trays for dentulous and edentulous cases
    f. pouring impressions adequately
    g. adequate trimming of the models
12. assist adequately in Periodontics by
    a. setting the proper instrumentation needed
    b. having needed equipment and materials on hand
    c. correct manipulation of dental materials
    d. proper instruments' transfer
    e. helping properly in the placing and removal of periodontal dressings
    f. helping properly in the placing and removal of sutures
13. assist adequately in Pedodontics by
    a. proper patient management
    b. setting the proper instrumentation needed
    c. having needed equipment and materials on hand
    d. correct manipulation of dental materials.

e. teach tooth brush and flossing techniques for plaque remova

f. proper instrument transfer

g. adequately helping in the placement of stainless steel crowns.

h. adequately helping in the different pulpal procedures

14. assist adequately in Oral Surgery by

    a. setting the proper instrumentation needed

    b. having needed equipment and materials on hand

    c. correct manipulation of dental materials

    d. proper instrument transfer

    e. helping properly in the placing and removal of sutures

15. assist adequately in Orthodontics by

    a. setting the proper instrumentation needed

    b. having needed equipment and materials on hand

    c. correct manipulation of dental materials

    d. adequate trimming of models

16. apply the basic principles of radiology when exposing dental film in the clinic.

17. protect her patient and herself when exposing dental film in the clinic by utilizing all safety measures available.

18. position patient, x-ray film and x-ray machine correctly for taking radiographs in the clinic using the bisecting and the paralleling techniques.

19. demonstrate darkroom procedures when developing radiographs by utilizing care in maintaining correct temperature and time.

20. demonstrate ability in clinic to deal with patients who tend to gag by utilizing methods available to decrease the gag reflex.
21. demonstrate ability in clinic to cope successfully with the child patient and the adult apprehensive patient.
22. evaluate the completed radiographs taken on a patient in clinic to determine the level of acceptability by applying criteria from radiograph evaluation forms.

VIII. Course Outline and Schedule of Instruction

(Refer to Clinical Schedule)

IX. Media:

Clinical facilities, participation of dental students, and patients.

X. Evaluation:

Each student will have experiences in each of the different clinics and specialties, requiring, achieving a minimal mastery level of 80%.

Students' evaluation of clinical performance will be performed daily using attached clinical evaluation form.

Each student will expose and process a total of 6 full mouth series consisting of the following:

1 pedodontic tray series
1 mixed dentition tray series
1 edentulous tray series
3 regular patient full series

The finished radiographic series will be evaluated according to the criteria specified in the evaluation form appended.

Students must attain a minimal mastery level of 75% on each full series with no more than 4 retakes allowed.

Hour allocation for assisting in the various specialty areas:

Clinic I	Hours
Orthodontic	25
Oral Surgery	50
Endodontic	25
Periodontics	60
Prosthodontic	30
Restorative	130
Pedodontic (including DAU) and TEAM	76
	396

Developed by Dr. Iris R. de Pérez

Revised by Chairside Assisting Staff, 1978

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Title: Sociology

II. Course Number: PAXD 046

III. Credit Hours: 4

IV. Clock Hours: 54

V. Description:

This course is intended to provide dental auxiliary student with the basic sociological concepts with emphasis in the ecological approach of man. It provides the student an understanding of the interaction between the physical socio-cultural environment with man's own values, beliefs and mores.

VII. Objectives:

A. General

At the completion of the course the dental auxiliary student will:

1. Develop knowledge about bio-social, economic, politics, and cultural factors that affect health in the society in which he or she lives.
2. Develop awareness of the influences of social institutions in the process of value transmission especially those values and beliefs concerning health.
3. Clarify their values with respect to their tolerance and understanding of social problems.
4. Identify current social changes in the modern society and its implications to public health.

B. Operational

T1 Explain the interrelation of the social, cultural, ideological and economic systems in the preservation of the individual, family and community health.

E1 Explain system as a concept.

E2 Define social structure.

E3 Describe the hospital as a social system.

E4 Define different systems of social organization; egalitarian and rank societies.

E5 Identify societies with different types of social organization.

E6 Identify the basic principles of social organization.

E7 Explain the concept of social stratification.

E8 Explain the different indicators that measure social classes and their importance to health.

E9 Explain the relation between different social groups and their relation to health behavior.

T2 Explain positions and roles and conflicting situations between the two.

E1 Relate positions and roles to dental health services delivery.

T3 Recognize that the family constitutes the primary biopsico-social unit.

E1 Discuss the family as a social group.

E2 Explain three functions of the family in society.

E3 Analyze the different stages of family growth.

E4 Describe the relationship of the different stages of family growth and development of its members.

T4 Analyze the elements affecting cultural evaluation.

E1 Define culture.

E2 Explain the different characteristics and functions of culture.

E3 Analyze the concepts impending the understanding among cultures.

E4 Identify various standards and ways of social control.

E5 Appreciate and respect Puerto Rican cultural manifestations evidenced by students reactions, manifestations and self conduct.

T5 Analyze socialization agents and its relation to health behavior.

E1 Define socialization.

E2 Summarize the socialization agents.

E3 Discuss the influences of learning upon behavior.

E4 Relate different types of socialization to health behavior.

T6 Explain the process of values, beliefs, and more formation.

F1 Define the concepts of values, beliefs and mores.

E2 Analyze the relation between these concepts.

E3 Identify some primary and secondary values in Puerto Rican culture.

E4 Explain the differences in secondary values of social groups.

E5 Discuss some strategies to measure values.

E6 Summarize the value clarification process.

E7 Reflect respect, appreciation and recognition of Puerto Rican culture evidenced by a value or value system related to respect, appreciation and recognition of Puerto Rican culture.

T7 Discuss different economic systems.

E1 Theorize about the different economic systems.

E2 Explain the relation between economy, social organization and health services delivery.

T8 Recognize the different change mechanisms: culturization, diffusion, invention and revolution.

E1 Analyze and summarize the different change parameters, analysis, level, time, ethic and the magnitude of change.

E2 Discuss the interpretation of change parameters to health behavior.

T9 Recognize community as a social entity with its own needs, problems, and responsibilities.

E1 Explain in his own words community as a concept.

E2 Select and discuss the five basic elements in a community.

E3 Analyze community as a social entity with its own needs, problems, and responsibilities.

T10 Analyze the interaction of groups in a health organization.

E1 Explain the concept of interaction.

E2 Describe man to man and man to group interaction.

E3 Explain through an example the interaction of different groups in a society.

T11 Evaluate the tendencies affecting population. Describe from a world-wide, regional and local point of view the tendencies affecting population as to:

a. volume

b. composition

c. distribution

E1 Identify demographic factors determining population changes as to:

a. natality and fertility

b. mortality

c. migration

VIII. Possible teaching strategies

1. Programmed lectures
2. Readings
3. Field trips
4. Document analysis
5. Pictures
6. Films
7. Guest interview

IX. Evaluation

Pre Test -- Diagnostic

Periodical Quizzes

Post Test -- Performance

X. Schedule of Instructional Periods

Period	Hours	Topic
I	2	Course Objectives Evaluation Procedures Pre Test
II	2.5	Social System Social Structure Systems of Social organization Quiz
III	2	Principles of Social Organization Concept of Social Stratification
IV	2.5	Indicators that measure social classes Relation between social groups
V	2	Family, Religion Quiz
VI	2.5	Positions and roles
VII	2	Study of culture Nature of culture
VIII	2.5	Problems posed by cultural differences Quiz
IX	2	Society culture and individual socialization
X	2.5	Concepts of Values Value clarification Quiz
XI	2	Economic Systems
XII	2.5	Social Change Quiz

Prepared by Mrs. Emilia Acevedo
and Ms. Delia Pabón, 1978.
Revised by Prof. Gamaliel Pérez, 1979.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Oral Hygiene (Pre-clinical)
II. Course Number: PAXD 025
III. Credit Hours: 2
IV. Clock Hours: 36
V. Methodology: 12 lectures / 24 lab
VI. Description:

Course is designed to build upon the concepts and principles that the dental auxiliary has been exposed to previously.

It includes experiences which will expand knowledge and procedures applicable to performing primary and secondary oral health services.

VII. Objectives:

A. General

Develop skills to prepare students for the performance of clinical procedures such as obtaining and interpreting a medical, dental and personal history, dental charting, classification of occlusion and removing calcarious deposits.

B. Operational:

1. obtain and interpret a thorough medical, personal and dental history.
2. state objectives for personal, medical and dental histories and describe how each influence appointment procedures.

3. describe signs and symptoms of specific diseases that may complicate or be complicated by dental procedures.
4. classify occlusion correctly utilizing Angle's classification system.
5. describe dental calculus, modes of attachment and distribution.
6. observe and record those areas which appear to deviate from the normal.
7. screen each patient for suspicious lesions by means of direct observation and palpation.
8. identify and describe instruments for oral prophylaxis and the principles for their selection.
9. describe uses and principles of activation of the sickly scaler.
10. describe the curet.
11. relate the concept of instrument design to the utilization of the curet at a particular tooth surface.
12. list instruments utilized for scaling, root planing and soft tissue curettage.
20. discuss advantages of keeping scalers and curets sharp at all times.

C. Laboratory:

1. conduct a soft tissue examination of the face, lips, and oral cavity.

2. correctly chart the oral condition.
3. correctly classify the occlusion of the lab partner.
4. perform a preliminary extra-intraoral exam of lab partner by utilizing optimum lighting, effective retraction and digital, bidigital and bimanual palpation.
5. demonstrate the use of scaler on a manikin by utilizing fulcrum and correct working stroke.
6. apply the principles of instrument sharpening in a lab situation.

VIII. Course Outline and Schedule of Instruction

Period	Hours	Topic	Laboratory
1	3	Goal Orientation Introduction to advanced Oral Hygiene clinical techniques. The Dental Hygiene appointment The Dental Hygienist Dental Hygiene Services 1. Medical-dental history taking 2. Oral inspection: use of explorer and probe Objectives: T1 Discuss what a Hygienist is and does T2 Define dental hygiene T3 Describe how the practice of dental hygiene is related to: a. the practice of dentistry b. total health care T4 State objectives for personal, medical and dental histories and describe how each influence appointment procedures.	

Period	Hours	Topic	Laboratory
2	3	Quiz #1	Lab Practicum: Medical-Dental History Taking on lab partner. T1 Practice Medical-Dental taking on lab partner and noting any past history of disease. T2 Obtain and interpret a thorough medical, persona and dental history. T3 Utilizing Angle's classification, record lab partner's occlusion.
3	3	Oral Inspection Dental Charting Principles of charting 1. extraoral inspection a. visual b. palpation 2. intraoral inspection a. visual b. palpation c. caries detection d. periodontal disease e. classification of occlusion f. habit Tooth Numbering System 1. continuous numbers 1-32 2. F.D.I. two digit 3. quadrant numbers 1-8 T1 Discuss the cause and effect of some oral manifestations T2 Explain why some areas of the oral cavity are more prone to cancer than others T3 Differentiate between the three most commonly used	

Period	Hours	Topic	Laboratory
4	3	Quiz #2	Lab Practicum: Dental charting on lab partner Extra/Intraoral Inspection Practice on lab partner T1 Conduct a soft tissue examination of the face, lips and oral cavity. T2 Correctly chart the oral condition. T3 Perform the systematic American Cancer Society oral inspection.
5	3	Calculus: Mode of Attachment Distribution Instruments: sickle scaler hoe scaler chisel scaler design purpose uses Objectives: T1 Describe dental calculus, mode of attachment and distribution. T2 Relate the concept of instrument design to the rationale for instrument selection. T3 Differentiate supra and sub-gingival calculus on the basis of color, texture and form.	

Period	Hours	Topic	Laboratory
6	3	Quiz #3	Lab Practicum on manikin Application of scalers Objectives: T1 Differentiate the strokes to be used with: 1. Sickle scaler 2. Chisel scaler T2 Identify a Jacquette (or other) sickle and identify its: 1. blades 2. facial or level surfac 3. lateral surface 4. shank T3 Identify a hoe scaler, including its: 1. blade 2. facial or level surfac 3. shank
7	3	Instruments: Curet design purpose uses T1 Relate the concept of instrument design to the utilization of the curet at a particular tooth surface. Lab Practicum: manikin application of curet T1 Identify a curet according to its shape. T2 Differentiate the various kinds of curets. T3 Identify the blade(s), the facial or level,	

Period	Hours	Topic	Laboratory
8	3	Quiz #4	Lab practicum (manikin) Application of scalers (Practi Application of curet (Practica T1 Apply a sickle scaler to a given area of the mouth by correctly utilizing a fulcrum rest, a mouth mirror and a wrist (rocking) motion. T2 Apply a hoe to a given area of the mouth by correctly utilizing a fulcrum rest, a mouth mirror and an arm (push-pull) motion. T3 Apply a curet to a given area of the mouth by correctly utilizing a fulcrum rest, a mouth mirr and a wrist motion.
9	3	Instrument Sharpening: Sharpening stones Basic principles of sharpening Sharpening procedures T1 Discuss advantages of keeping scalers and curets sharp at all times. T2 Explain the purpose of instrument sharpening and the effect of a dull instrument on scaling procedures.	

(Cont.)

Period	Hours	Topic	Laboratory
		Lab Practicum: Sharpening of instruments T1 Apply the principles of instrument sharpening. T2 Sharpen a sickle, hoe or chisel so that the cutting edge is sharp and so that instrument shape is unaltered. T3 Sharpen a curet so that the cutting side of the blade is sharp and so that instrument shape is unaltered. Quiz #5	
10	3	Oral Health Indicies Plaque Bleeding point Periodontal T1 Differentiate between a plaque index, a bleeding point index and a periodontal index. Oral Health Program Objectives: T1 Explain three phases of a total treatment plan. T2 Measure a patient's success at practicing preventive procedures from appointment to appointment. Lab Practicum: T1 Prepare a complete plaque and hemorrhage point charting (index).	

Period	Hours	Topic	Laboratory
11	3	Quiz #6	Lab/Clinic Practicum on Lab Partner Practical: Preliminary exam Oral prophylaxis
12	3	(Partial Exam)	Lab/Clinic Practicum on Lab Partner Practical: Preliminary exam Oral prophylaxis

VIII. Teaching Methods

- Lectures
- Demonstration
- Practice

IX. Media

- Slides
- Overhead Projector
- Laboratory manikin
- Modules as assigned

X. Evaluation

80% minimum mastery level in didactic and laborarory.

6-15 minute quizzes
1-1 hour partial exam

% Grade on Quiz A	Course Points
93 - 100%	10
83 - 92%	9
80 - 84%	8
00 - 79%	-

% Grade on Quiz B	Course Points
93 - 100%	8
85 - 92%	7
80 - 84%	6
00 - 79%	-

% Grade on Partial Exam	Points
93 - 100%	40
86 - 92%	35
80 - 85%	32
00 - 79%	--

XI. Requirements: Laboratory

Four Practical exams will be given (25 points each)

1. Use of scalers
2. Use of curets
3. Preliminary exam
4. Prophylaxis

The exams will be evaluated according to the criteria on the evaluation sheets. Total of 200 points. Course grades will be assigned according to the following course point tallies:

Didactic	Weight	Laboratory	Weight
85 - 100 pts.	A 50%	95 - 100 pts.	A 50%
75 - 84 pts.	B	85 - 94 pts.	B
59 - 74 pts.	C	75 - 84 pts.	C

XII. Textbook:

Wilkins, Esther. Clinical Practice of the Dental Hygienist, 4th edition, Philadelphia, 1971.

Developed by: Mrs. Josephine Rosa
February/1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Title: Community Dental Health
II. Number: PAXD 028
III. Credit Hours: 6
IV. Clock Hours: 72
V. Type of Course: Didactic with Practical Experience
VI: Course Description:

This is a course in Community Health designed to provide the Dental Hygiene Student with the knowledge skills and attitudes necessary in the analysis of the health problems of the community and the strategies to deal with these problems.

This course will emphasize in health education concepts, practices and trends to foster the development of possitive attitudes toward oral health. It will develop knowledge and skills for the student, effective participation in planning, developing and evaluating oral health activities.

VII. Objectives:

A. General

At the completion of the course the student will:

1. analyze dental health needs and attitudes toward dental care of the community and suggest sound approaches to be taken for their correction.

2. establish rapport with the consumer so that their needs may be identified according to the group perceptions.
3. be aware of her or his responsibility to look for alternatives and solutions to the health problems of the community in which he or she lives.
4. apply all the available and effective preventive procedures.
5. participate effectively in the planning, development, and evaluation of oral health educational programs.
6. establish and maintain rapport with local professional associations, educational institutions, and related allied health personnel.
7. express concern for individual's well being and show interest in them as individuals.

B. Operational

T1 Analyze the historical events that contributed to the development of Dental Public Health as a specialty.

E1 Explain the legislation that contributed to extend public health services.

E2 Value the importance of scientific discoveries in the development of Dental Public Health.

T2 Evaluate Charles Winslow's and Hanlon's definition of public health.

- E1 Identify the elements of public health as stated in each definition.
- E2 Relate prevention of disease and promotion of physical health.
- E3 Analyze Winslow's and Hanlon's concept of community efforts.

T3 Evaluate the concept of health and disease as a continuum.

- E1 Define health and disease as a continuum.
- E2 State the components of the ecological model.
- E3 Sketch by means of a diagram the ecological concept of health and disease as a continuum.
- E4 Explain interdisciplinary nature of the health concepts.

T4 Value the Team Approach to prevention of dental disease

- E1 Explain preventive dentistry concept.
- E2 Identify participants in the Team approach prevention to dental disease.
- E3 Explain the rationale for their participation.
- E4 Describe preventive and promotive health procedures.
- E5 Examine the role of the dental hygienist in primary and secondary prevention in community health programs.

E6 Discuss the philosophy and objectives of the TEAM program and the advantages of applying the TEAM philosophy to public health services.

T5 Evaluate the health indicators used to measure community health.

E1 List direct and indirect health indicators.

E2 State functions of both indicators.

E3 Relate both indicators to one another.

E4 Identify three limitations of health indicators in measuring community health.

E5 Explain why the assessment of periodontal disease is more subjective than caries assessment.

T6 Analyze the criteria applied in dental public health programs to determine which problems would receive priority.

E1 Explain the techniques to assess attitudes of the community toward dental care.

E2 Value the importance of water fluoridation in a community.

E3 Illustrate the geographic distribution of dentists and Dental Auxiliary personnel in Puerto Rico.

T7 Value the importance of using biostatistics methodology in the health sciences.

- E1 State and explain the stages of the scientific method.
- E2 Define and give examples of universe, sample, parameter and statistics.
- E3 Define variable.
- E4 Represent and interpret data in tables and graphs.
- E5 Prepare frequency distribution.

T8 Explain the ways in which the epidemiological approach is useful in controlling dental disease.

- E1 Define the term epidemiology.
- E2 Explain the components of epidemiological concept.
- E3 State five applications of epidemiology in dental public health.
- E4 Relate fluoride research to the four steps of the epidemiological strategy.
- E5 Discuss dental caries as a chronic disease

T9 Value the importance of Health Education as an Intervention Strategy in the prevention of dental disease.

E1 Given a real or simulated situation, the student will be able to clarify her values, attitudes and behavior with respect to oral health care.

E2 Analyze attitudes and values toward oral health care.

E3 State how conflicts between the internal and external forces with which the individual must cope, affect his or her health behavior.

E4 Summarize the principal assumptions frequently made concerning dental health care.

T10 Explain the role of the dental hygienist as a changing agent.

E1 define the process of change.

E2 list the factors favoring change.

E3 list the ways of inducing change.

E4 discuss health education as a process of change.

E5 discuss three factors affecting change in health behavior.

E6 accept his or her role as an agent of change.

T11 Analyze and apply the steps in the educational process.

E1 list the steps in the process.

E2 state the importance of recognizing and expressing needs.

E3 describe the types of motivation.

E4 explain the importance of setting goals.

E5 list the types and characteristics of goals.

E6 state the importance of reinforcement.

E7 explain the use of evaluation program.

T12 Discuss communication as a factor influencing the learning process.

E1 state and discuss the basic elements of the communication as applied to the educational process.

E2 explain the barriers of the communication process.

E3 value the importance of effective communication in achieving health education goals.

T13 Discuss perception as a factor influencing the learning process.

E 1 Analyze perception and how it affects the learning process.

E2 summarize the factors that affects perception.

T14 Analyze motivation as a factor influencing the learning process.

E1 discuss Maslow's theory on motivation.

E2 identify and explain five levels of needs in Maslow's model.

E3 describe how lack of satisfaction of safety needs interfere with the individual's education.

E4 list and discuss actual concerns related to security needs in Puerto Rican people.

E5 diagnose principal elements of dental patient motivations.

E6 value the importance of using patients frame of reference in patient motivation.

E7 discuss possible problems arousing in the motivation of a patient who is expressing feelings of fear, anxiety and pain.

E8 explain how to use insatisfaction of social and esteem levels as tools in patient motivation.

E9 discuss how the finding of the Snyder test could be used as a tool for patient motivation.

E10 explain how the phase microscope could be used in patient motivation.

E11 formulate hypothesis about possible motivation techniques for inducing patients to adopt proper oral hygiene care.

T15 Analyze how the socioeconomic factors influence the learning process.

- E1 the student will reflect respect, appreciation and recognition of cultural values of patients evidenced by respect and appreciation of individuals.
- E2 recognize the importance of satisfying social needs in interpersonal situations.

T16 Evaluate basic assumptions about instructional design.

- E1 discuss five principles derived from the learning research, relevant to instructional design of a dental educational program.
- E2 apply these principles to a plaque control educational program.
- E3 analyze three kinds of learning situations and state examples of each.

T17. Analyze the conditions applicable for changing attitudes.

- E1 state procedures for attitudes measurements.
- E2 select and discuss methods for developing and changing attitudes toward dental health.

T18 Explain the steps for teaching motor skills.

- E1 name and discuss the characteristics of motor skills.
- E2 give examples of motor skills emphasized in oral health education.

T19 Identify target group of the community population.

- E1 explain the use of questionnaires, interviews, and record analysis for determining patients educational and clinical needs.
- E2 state the criteria used for identifying target group.

T20 Develop a plan for a learning activity consistent with clients learning style, attitudes and previous experience.

- E1 value the importance of developing learning objectives consistent with consumer's needs.
- E2 explain the taxonomy of behavioral objectives.
- E3 state examples of learning objectives developed for a target group selected.
- E4 explain the procedures to provide individuals involvement for oral health education.
- E5 evaluate and select appropriate methods and activities to achieve dental health education goals.
- E6 give examples of resources related to educational goals.
- E7 explain evaluation procedures for assessing behavioral changes in an oral health educational program.

Developed by: Mrs. Emilia Acevedo
February/1979

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VIII. Schedule of Instructional Periods (48 hours)

Period	Hours	Topic
1	3	Class Introduction Objectives and Evaluation procedures Development of Dental Public Health Definition and concepts.
2	3	Health and Disease as a continuum Ecological Model Quiz #1
3	3	Team approach to dental disease
4	3	Health indicators and criteria Quiz #2
5	3	Biostatistic methdology in health sciences
6	3	Epidemiological approach in dental health Quiz #3
7	3	Intervention strategies
8	3	Role of a Dental Hygienist Quiz #4
9	3	Steps in educational process
10	3	Communication, a factor influencing the learning process Quiz #5
11	3	Perception: a factor influencing the learning process Motivation and learning Quiz #6
13	3	Socioeconomic factors influence in learning process
14	3	Instructional design: Planning Health Programs Quiz #7

Period	Hours	Topic
15		Developing and changing attitudes Steps for teaching motor skills
16		Identify Target Groups

24 Hours for practical experience. Plan develop and evaluate the educational program in a public health setting.

IX. Methodology

1. Programmed lectures
2. Guest interviews
3. Roll playing
4. Case method
5. Triger films
6. Seminar
7. Conference

X. Evaluation

Periodical Quizzes
Project Assignment
Attitudinal Measures
Observational Reports

XI. Books:

1. Berelson, B. amd Steiner, OA.; Human Behavior: An Inventory of Scientific Findings. New York Harcourt. Bruce Jovanovitch, 1967.

2. Bagner, R.P. and Ambron, S.R.; Subpopulational Profiling of the Psycho - Educational Dimensions of Disadvantaged Preschool Children. New Jersey, Educational Testing Services, 1969.

3. Carlos, J.O.; Prevention and Oral Health, Washington, D.C. Government Printing Office, 1974.

4. Grant, Ruth E.; Health Teaching in Schools: For Teachers in Elementary and Secondary Schools. 5th edition, Philadelphia, W.B. Saunders Co., 1968.

5. Horowitz, H.S.; A Review of Systemic and Topical Fluorides for the Prevention of Dental Caries, Community Dentistry and Oral Epidemiology, J. 1:104-114, 1973.

6. Karlins, M. and Abelson, H.I.; Persuasion: How Opinions and Attitudes are Changed. New York, Springler Publishing, 1970.

7. Knutson, A.L.; The Individual Society and Health Behavior. New York, Russell Sage Foundation, 1965.

8. Pelton, W.I. et all; The Epidemiology of Oral Health. Cambridge, Harvard University Press, 1969.

9. Padshadley, D.W. and Werse, R.L.; Introduction to Dental Public Health A Self Instruction Course. Washington, D.C. Government Printing Office, 1964.

10. Ross, M.G.; Community Organization, Theory, Principles and Practice. New York, Harper and Row, 1967.

11. Stoll, F.A. and Calherman, J.; Dental Health Education 4th edition, Philadelphia, Lea & Febiger, 1972.

12. Di Orio, Louis P., and Madsun, Kenneth O.; Educating the Patient in the Prevention of Dental Disease, Chicago, March Publishing Company, 1972.

13. Principles of Public Health Dentistry, Harvard University Press, 1970.

14. Introduction to Dental Public Health, United States Department of Health Education and Welfare, 1964, Public Health Services, Publication number 1134.

Developed by: Mrs. Emilia Acevedo
February/1979

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PLAN FOR PRACTICAL EXPERIENCE
IN DENTAL HEALTH EDUCATION
AND PUBLIC HEALTH PROCEDURES

Rationale:

Preparation of health personnel in becoming more challenging every day as medicine advances in the discovery of new knowledge and as socioeconomical and educational level of the community increases.

The graduate in the health services field must be a continuous learner and must also be a person very sensitive to the community needs. Theoretical concepts and knowledge will not be enough in serving a dynamic community nowadays.

Field experiences will help the future dental auxiliary in both integrating and relating theory into practice and in knowing and understanding the community so as to serve it in a more effective way.

Field experience will enable the future graduate to practice what has been learned in the classroom and to explore new learning situations.

Objectives:

1. Relate students with social behavior patterns of patients.
2. Appreciate cultural characteristics of people.
3. Establish rapport with health team members and function as a responsible participant of this team.
4. Provide educational services to the community outside the conventional environment in which a dental auxiliary more commonly finds herself.

5. Provide students practical learning experiences in utilizing research methodology in selecting target groups, and delivering dental health services.
6. Relate theory to practice.
7. Explore new learning situations which stimulate students to continue learning.
8. Organize a program for dental health delivery.

Procedure:

Field experience will be carefully planned. Students will visit three different clinical settings that is: family dental programs in Caguas, extramural clinics at Vista Hermosa, Río Piedras and School Dental Clinics at Head Start Projects.

For each activity the students will have specific plans which will be discussed with the students before going to the field.

A seminar will take place after each practical experience. The purpose of this seminar is to integrate concepts, to share experiences and to encourage students to read and analyze literature related to the topic.

The students will be assigned to a specific neighborhood through all the experience so as to provide enough time to get to know the people and the community and to put into practice the theoretical knowledge.

Staff members (dental health education and public health instructor) will coordinate practical experience.

Through conferences with the students and the program directors the coordinator will be able to determine administrative and physical facilities, time best suited for the program that be amenable to both institutions and dental auxiliary student, and personnel to give support to students.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Seminar III
II. Course Number: PAXD 034
III. Credit Hours: 1
IV. Clock Hours: 12
V. Methodology: discussion
VI. Description:

Time will be devoted to discussion of any problem which may arise during the clinical experiences in the assigned clinics. Emphasis will be placed on the sharing of clinical experiences in order to enhance the clinical exposure of each student.

VII. Objectives:

A. General

Acquire further experience in problem-solving situations related to their clinical experiences.

B. Operational

During these seminar sessions the student will:

1. demonstrate ability to problem-solve by verbalizing possible solutions to problems presented in class.
2. relate to classmates, a clinical experience that may have posed an unusual situation.

VIII. Schedule of Instruction

(refer to class schedule)

IX. Evaluation

Pass or fail - based on attendance and participation.

Prepared by Staff, 1978

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title Course: General Organic and Inorganic Chemistry

II. Course Number: PAXD 040

III. Credit Hours: 3

IV. Clock Hours: 36

V. Methodology: Lecture

VI. Description:

This course presents basic concepts of modern theoretical and descriptive chemistry. It consists of two units; general inorganic and organic chemistry. There are no laboratory periods as requirements.

VII. Objectives:

A. General

Provide the dental auxiliary student with a general knowledge of inorganic and organic chemistry as to theory and terminology.

B. Operational

Terminal Objectives

T_1 Explain the units of measurement.

T_2 Explain the composition of matter.

T_3 Analyze chemical bondings.

T_4 Explain the different type of chemical equations.

T_5 Discuss the factors affecting reaction rates.

T_6 Analyze Boyle's, Charle's, and Dalton's gas laws.

T_7 Discuss oxidation - reduction process.

T_8 Explain composition of acid, bases, salts and electrolytes as related to acid base balance in the body.

T_9 Describe and discuss oxidation-reduction as related to the biological oxidation-reduction reactions taking place in the mitrochondria of cells.

T_{10} Analyze solutions related to solvent action in digestion.

T_{11} Evaluate colloids as related to the nature and properties of proteins, amino-acids and nucleic acids.

T_{12} Discuss covalent compounds as related to the types of bonds that must be broken and rearranged in the formation of high energy phosphate bonds.

T_{13} Analyze fat emulsifications.

T_{14} Explain the various classes of organic compounds: hydrocarbons, alcohols, ethers, cyclic and heterocyclic compounds.

T_{15} Relate organic compounds to carbohydrates, fats, proteins, vitamins and hormones.

VIII. Course Outline and Schedule of Instruction

A. Course Outline

1. Fundamental Concepts
    a. Units of measurements: metric and English systems
    b. Temperature scales
2. Matter and Energy
    a. Definition, properties, states of matter
    b. Composition of matter
        1) Elements
        2) Compounds
        3) Mixtures

c. Energy

3. The Atom

a. Fundamental particles

b. Atomic numbers and atomic weights

c. Isotopes

d. The periodic chart

4. Chemical Bonding

a. Molecules

b. Electrovalence and covalence

c. Radicals

d. Formula writing

5. Chemical Equations

a. Balancing chemical equations

b. Types of chemical reactions

c. Factors affecting reactions rates

6. The Gas Laws

a. Boyle's law

b. Charles' law

c. Dalton's law

d. Pressure - temperature relationship

7. Oxidation - Reduction

a. Oxygen

1) Properties

2) Combustion

3) Uses of oxygen

b. Oxidation and oxidizing agents

c. Reduction and reducing agents

d. Medical importance of oxidation - reduction

8. Water
    - a. Structure of water molecule
    - b. Chemical and physical properties of water
    - c. Purification of water
    - d. Hydrolisis
    - e. Hardness in water
9. Liquid mixtures
    - a. Solutions
    - b. Suspensions
    - c. Colloids
    - d. Emulsions
10. Acids and Bases
    - a. Acids
    - b. Bases
    - c. pH values
11. Salts
    - a. Solubility of salts
    - b. Reaction of salts
    - c. Types of salts
    - d. Uses of salts
    - e. Buffer solutions
12. Ionization
    - a. Theory of ionization
    - b. Strong and weak electrolytes
    - c. Importance of ions in body chemistry
13. Introduction to Organic Chemistry

- a. Comparison of organic and inorganic compounds
- b. Structural formulas
- c. Isomers
- d. Bonding ability of carbon

14. Hydrocarbons
    - a. Methane series
    - b. Ethane series
    - c. Ethyne series
    - d. Uses of hydrocarbons
15. Alcohols
    - a. Properties of alcohols
    - b. Uses of alcohols
    - c. Types of alcohols
16. Ethers
    - a. Nomenclature
    - b. Uses of ethers: anesthetics
17. Aldehydes
    - a. Nomenclature
    - b. Uses of aldehydes
    - c. Test for aldehydes
18. Ketones
    - a. Nomenclature
    - b. Uses of ketones
19. Organic Acids
    - a. Nomenclature
    - b. Properties and reactions of organic acids
    - c. Medically important organic acids

20. Esters
    - a. Nomenclature
    - b. Medical uses of esters
21. Amines
    - a. Definition and types of amines
    - b. Amino acids
22. Cyclic Hydrocarbon Compounds
    - a. Types of cyclic compounds
        - 1) Aromatics
        - 2) Non-aromatics
    - b. Benzene and its derivatives
23. Heterocyclic compounds
    - a. Common heterocycles compounds
    - b. DNA & RNA
    - c. Alkaloids
        - 1) Definition
        - 2) Medicinally used alkaloids

B. Schedule of Instructional Periods

Period	Hours	Topic
1	1.5	Fundamental Concepts
2	1.5	Matter and Energy
3	1.5	The Atom
4	1.5	Chemical Bonding
5	1.5	Chemical Equations
6	1.5	Chemical Equations (Cont.)
7	1.5	First Partial Exam (100 points)

Period	Hours	Topic
8	1.5	The Gas Laws
9	1.5	Oxidation - Reduction
10	1.5	Oxidation - Reduction (Cont.)
11	1.5	Water and Liquid Mixtures
12	1.5	Liquid Mixtures (Cont.)
13	1.5	Second Partial Exam (100 points)
14	1.5	Acids-Bases-Salts
15	1.5	Ionization
16	1.5	Inorganic Chemistry final exam (200 points)
17	1.5	Introduction to Organic Chemistry
18	1.5	Hydrocarbons
19	1.5	Alcohols and Ethers
20	1.5	Third Partial Exam (100 points)
21	1.5	Aldehydes-Ketones-Organic Acids
22	1.5	Esters-Amines
23	1.5	Cyclic and Heterocyclic Compounds
24	1.5	Organic Chemistry Final Exam (200 points)

IX. Teaching Methods: Lectures, Demonstrations

X. Evaluation:

1. Periodical Quizzes
2. Three partial tests (100 points each)
3. Two final tests (200 points each), one at the end of the phase on Inorganic Chemistry and the other at the end of Organic Chemistry.

XI. Prerequisite Course: None (High School chemistry as an entrance requirement)

XII. Textbook:

Sackheim, George I. and Schultz, Ronald M.
Chemistry for the Health Sciences (Latest Edition)

XIII. References:

Mortimer, Charles E.
Chemistry: A Conceptual Approach (Latest Edition)

Griffin, Rodger W.
Modern Organic Chemistry (Latest Edition)

Prepared by Mrs. Sofía Jiménez, 1976

Revised by Mrs. Ramonita Correa, 1978

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Number: PAXD 032
II. Course Title: Clinic I
III. Credit Hours: 5
IV. Clock Hours: 132
V. Methodology: Clinic
VI. Course Description:

Clinical course provides the opportunity for students to develop those skills necessary for performing an oral prophylaxis and patient education. Students will also apply correct techniques for gathering of diagnostic data pertinent to the delivery of oral hygiene services.

VII. Objectives:

A. General

Clinical sessions will enable the student to:

1. utilize and apply with accuracy the basic principles of instrument design in the performance of an oral prophylaxis.
2. utilize and apply with accuracy the knowledge from related basic and dental sciences for the gathering of diagnostic data such as health histories, oral inspections, and oral health indices.

B. Operational

Students in providing dental care will treat a minimal number of patients with the following proficiency levels:

1. obtain 5 medical and dental histories, utilizing the interview-questionnaire method with 100% accuracy that must indicate the following medical problems which can complicate dental treatment:

Allergy
Rheumatic fever
High blood pressure
Pregnancy
Bleeding problems
Anxiety
Medication
Diabetes
Kidney or liver disease
Heart disease
Respiratory disease
Venereal disease

2. perform 5 complete oral inspections and examinations with 100% accuracy to include the following:

    a. Extraoral:

        1) swelling of the neck

        2) irregular movements of the T.M.J.

        3) swelling or asymmetry of the face

    b. Intraoral:

        1) alteration in surface anatomy: ulcer, hypertrophy, atrophy

        2) textures: soft and hard

        3) color: red, white, pigmented

3. chart 3 oral conditions other than periodontal involvements with 100% accuracy to include the following:

    a. missing teeth

    b. existing restorations

    c. pit and fissure defects

    d. oral habits

    radiographic evidence of:

    a. interproximal caries

    b. impacted third molars

    c. radio-opaque and radiolucent abnormalities

4. classify 3 occlusions utilizing "Angle's classification" with 100% accuracy to include the following:

    Class I
    Class II a Class II b
    Class III
    Over bite, cross bite and overjet

5. evaluate 10 prophylaxis cases to classify as 1, 2, 3 or 4 in accordance with given standards through a thorough soft and hard tissue examination to an 80% accuracy.
6. maintain asepsis to prevent disease transmission from patient to patient at all times with 100% proficiency to include the following:
   - a. sanitize air syringe tip
   - b. protective head rest cover
   - c. sanitize bracket table
   - d. protective cover on spot light handle
   - e. maintain chain of sterility
7. take precautionary measures to prevent diesase transmission from operator to patient with 100% accuracy to include the following:
   - a. use of face mask when indicated
   - b. short unpointed finger nails
   - c. maintain chain of sterility
8. utilize instruments by employing correct grasp, fulcrum and stroke causing least undue trauma and/or laceration 100% of the time to include

   correct operator-patient position
9. remove all soft and hard deposits from all exposed tooth and/or root surfaces on 12 patients with a minimum proficiency of 80% to include the following:

   4 class 1 patients
   4 class 2 patients
   4 class 3 patients

10. Develop an oral health program for his patients designed with an 80% proficiency to meet patient's individual needs and including the following:
    - a. educational and motivational aids
    - b. clinical preventive treatment
11. chart 1 periodontally involved oral condition with 80% accuracy to include the following:
    - a. perio pocket measurement
    - b. furcation involvement
    - c. tooth mobility
    - d. mucogingival involvement
    - e. oral health indices, plaque, bleeding point, periodontal

VIII. Course Outline and Schedule of Instruction (see pre-clinical course outline)

IX. Teaching Methods:

Clinical work

X. Media:

Treating patients under supervision of dental auxiliary faculty.

XI. Evaluation:

See attached evaluation form.

(patient requirements) 4 class I patients
4 class II patients
4 class III patients.

XII. Prerequisite course:

See courses of Level I, Track A and B
All courses first trimester of Level II

XIII. Textbook:

Wilkins, Esther, "Clinical Practice of the Dental Hygienist"
Lea and Febiger, Phila., 4th Ed., 1976

Students will rotate through Operative Dentistry clinics 1/2 a day every other week or 24 hours a trimester.

The same evaluation criteria utilized in the 01 year curriculum for restorative clinic will be used.

Prepared by Staff, 1978

D.H. PERIO. CLINIC EVALUATION SHEET

Patient____________________ Record No.__________ Date__________

Student____________________ Time started________

Instructor____________________ Minimum 80% (each procedure)

PROCEDURE	Possible points	Total pts. earned	PROCEDURE	Possible points	Total pts. earned
I. Medical History Criteria 1. previous history of disease 2. taking medications 3. allergies 4. systemic conditions	12		5. Habits: a. tongue thrust b. digital sucking c. others	3	
II. Dental History A. Clinical Findings 1. soft tissue: a. color b. consistency c. texture d. exudate	4		6. T.M.J. a. clicking b. deviant closing	2	
2. Occlusion: a. max-mand relationship b. occlusal disharmony	2		B. Radiological Findings: 1. pathologic findings 2. vertical bone 3. horizontal bone loss 4. lamina dura 5. P.D. membrane space 6. retained roots 7. impactions 8. fractures 9. root size and shape 10. supernumerary teeth	10	
3. Hard tissue: a. caries b. calculus c. hypoplasia d. wear facets e. fractures f. inclinations	6				
4. pain: a. percussion b. hot or cold c. toothache	3		Remarks:		

PROCEDURE	Possible points	Total pts. earned
C. Patient Oral Hygiene Home Care : 1. type of toothbrush 2. Brushing habits 3. Use of floss	6	____ ____ ____
D. Perio Findings : (charting) 1. Perio pocket measurement a. correct insertion b. correct reading (within 1 mm)	6	____ ____ ____
2. Furcation Involvement 3. Tooth mobility (within 1 mm)	3 6	____
4. Mucogingival involvement	2	____ ____
Prophylaxis : A. Scaling B. Polishing C. Oral Health Inst. 1. Debris index 2. Plaque Removal technique 3. a. toothbrushing b. flossing c. other aids	5 5 4	____ ____ ____ ____ ____ ____ ____ ____
nesthesia : . Correct application of topical	1	
. Use of sterile technique	1	____ ____
. Comprehensive knowledge of anatomical landmarks	3	____
Comprehensive knowledge of nerves to be anesthetized	3	____

PROCEDURE	Possible points	Total pts. earned
V. Operation : 1. Organization: a. correct set-up b. instrument sharpness c. evaluation sheets	3	____ ____ ____ ____
2. Neatness : a. uniform b. shoes c. nails d. make-up e. jewelry	5	____ ____ ____ ____ ____ ____
3. Self Confidence	3	____
4. Use of time	2	____
5. Comprehensive knowledge	3	____
6. Patient Handling : a. consideration b. rapport c. interest d. responsibility	4	____ ____ ____ ____ ____

Remarks:

PROCEDURE	Possible points	Total pts. earned	PROCEDURE	Possible points	Total pts. earned
VI. Root Planing and Curettage A. Instrumentation 1. Uses fulcrum, mirror light, and air	4	____ ____	VI. Root Planing and Curettage A. Instrumentation 1. Uses fulcrum, mirror light, and air	4	____
2. Uses correct grasp and correct strokes with curets	3	____	2. Uses correct grasp and correct strokes with curets	3	____
3. Uses correct curet according to the area being worked on	1	____	3. Uses correct curet according to the area being worked on	1	____
B. Treatment 1. Root planing a. planed root surfaces feel smooth and hard	15	____	B. Treatment 1. Root planing a. planed root surfaces feel smooth and hard	15	____
C. Curettage 1. Necrotic tissue removed	5	____	C. Curettage 1. Necrotic tissue removed	5	____
2. Rounded, even gingival margins	5	____	2. Rounded, even gingival margins	5	____
3. Minimal bleeding and trauma	5	____	3. Minimal bleeding and trauma	5	____
____quadrant	total	____	____quadrant	total	____
VI. Root Planing and Curettage A. Instrumentation 1. Uses fulcrum, mirror light, and air	4	____ ____	VI. Root Planing and Curettage A. Instrumentation 1. Uses fulcrum, mirror light, and air	4	____
2. Uses correct grasp and correct strokes with curets	3	____	2. Uses correct grasp and correct strokes with curets	3	____
3. Uses correct curet according to the area being worked on	1	____	3. Uses correct curet according to the area being worked on	1	____
B. Treatment 1. Root planing a. planed root surfaces feel smooth and hard	15	____	B. Treatment 1. Root planing a. planed root surfaces feel smooth and hard	15	____
C. Curettage 1. Necrotic tissue removed	5	____	C. Curettage 1. Necrotic tissue removed	5	____
2. Rounded, even gingival margins	5	____	2. Rounded, even gingival margins	5	____
3. Minimal bleeding and trauma	5	____	3. Minimal bleeding and trauma	5	____

PROCEDURE	Possible points	Total pts. earned	PROCEDURE	Possible points	Total pts. earned
Evaluation of Case (written report)			Remarks:		
1. Preparation a. follow given outline format	5	____			
b. be concise and neat	5	____			
2. Comprehensive knowledge					
a. recommendations	5	____			
b. referrals	5	____			

EVALUATION FORM

Student's Name ____________________ Date ____________________

Patient's Name ____________________ Age _____ Record No. ____________

Case Classification by Student ____

____

*Instructor's Signature ________________________________

Performance Level Classification __________ Case Classification __________

Scores

____1. Case Classification ______(0-3-5) Oral Exam (5)______
Medical History (5) ______

____2. Oral Health Program ______
use of educational and motivational aids (1-5)______
preventive treatment plans (1-5)__________

____3. Ethical behavior (5)_______ (Outstanding additional 1-5)_______

cubicle preparation (1)	_____	aseptic techniques (1)	_____
neatness & appearance (1)	_____	attitude towards patient	
professional attitude (1)	_____	and supervisors (1)	_____

____4. Instrument sharpening (4)

lubricate arkansas stone (1) _____
direct stone against instrument blade (1)_____
test sharpness of blade (1) _____
sharpness frequency during procedure (1)_____

____5. Cavitron (4)_____

sterile tip (1) _____
correct tunning (1) _____
fulcrum (1) _____
stroke (1) _____

____6. Scaling

supragingival
subgingival

Possible points_____

____7. Polishing

stains
non calcified deposits

Scores

_____3. Charting (5)________

regular ______
periodontal______

TOTAL POINTS POSSIBLE NUMBER OF POINTS______

______ Possible number of points to be earned in items No. 4 and 5 are determined as follows:

No. of teeth X case classification (see the following chart)

Example: 20 teeth X case classification 3 = 60 pts. possible

Soft deposits

8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

Hard deposits

8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

. Levels of Performance Grading

1. Level I
   a. calculus
      1) supragingival - deduct 1 point for every area left
      2) subgingival - deduct 1/2 point for every area left
   b. soft deposits and/or stains - deduct 1/2 point for every area left
2. Level II
   a. calculus
      1) supragingival - deduct 2 points for every area left
      2) subgingival - deduct 1 point for every area left
   b. soft deposits and/or stains - deduct 1 point for every area left
3. Level III
   a. calculus
      1) supragingival - deduct 3 points for every area left
      2) subgingival - deduct 2 points for every area left
   b. soft deposits and/or stains - deduct 1 1/2 points for every area left

II. Classification of Patients (See chart)

CHART FOR CASE CLASSIFICATION

	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5
Gingivitis	none to mild	mild	moderate	severe	severe
Periodontal disease	none	none	mild to moderate localized	severe localized	severe
Non calcified deposits and stains	none to light	medium	medium	heavy	heavy
Calcified Deposits	1	1 - 2	2 - 3	3 - 4	4 - 5

During treatment the case classification may be changed by faculty, if the case presents difficulties not anticipated. The student must request and justify such change.

NOTE: In cases of fifteen (15) or less natural teeth, the case classification will be lowered by one.

Criteria for calcified deposits:

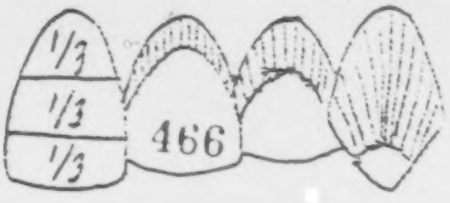
Type and extension will determine the classification according to the degree of difficulty.

1. No calculus or light supra gingival calculus
2. Supragingival: Light
   Location: lower anterior and/or maxillary posterior teeth
   Subgingival: none to isolated deposits
   Location: on no more than eight (8) teeth
3. Supragingival: medium
   Location: generalized
   or
   Supragingival: heavy
   Location: lower anteriors and/or on no more than other eight (8) teeth
   Subgingival: isolated
   Location: generalized
4. Supragingival: heavy
   Location: generalized
   Subgingival: isolated (found in different areas throughout mouth)
   Location: generalized
   or
   Supragingival: none to medium
   and
   Subgingival: continuous
   Location: no more than eight (8) teeth
5. Supragingival: heavy
   Location: generalized
   Subgingival: and/or continuous
   Location: generalized

Note:

Supragingival calculus	Criteria
light	following gingival margin 1 mm or less
medium	2 mm or less of tooth and exhibiting thickness
heavy	1/2 the tooth or more and exhibiting thickness

Non Calcified deposits	Criteria
light	Soft deposits or stains covering not more than 1/3 of tooth
medium	Soft deposits or stains more than 1/3 of tooth but not more than 2/3 of exposed tooth
heavy	Non calcified deposits or stains covering more than 2/3 of exposed tooth



Appt. No.	Date	Service Rendered	Instructor	*Points deducted Sealing

Instrumentation

Tissue State

Time:
In:
Out:

*1-5 points - will be deducted for:

a. improper instrumentation
b. traumatized tissue
c. utilization of time

Dietary Analysis 1 - 5 points

Fermentable CHO

A. 1. types
   2. frequency
   3. time of use
   4. consistency
   5. quantity

B. Acid production 1 - 3 points

C. Alternatives 1 - 3 points

Comments:

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Advanced Oral Hygiene (pre-clinical)
II. Course Number: PAXD 050
III. Credit Hours: 3
IV. Clock Hours: 60
V. Methodology: Lectures 15/ Laboratory 41
VI. Course Description:

Course is designed to build upon the concepts and principles previously learned in the Oral Hygiene pre-clinical course.

It includes experiences which will expand knowledge and procedures necessary for performing secondary oral health services.

VII. Objectives:

A. General

Develop skills to prepare students for the performance of clinical procedures such as root planing, soft tissue curettage, placing periodontal packs and ultrasonic scaling.

To provide the student with the necessary knowledge and skills for the utilization of diagnostic aids and introduce her to the basic knowledge of myofunctional therapy.

B. Operational

At the end of this course the student will:

Lecture:

1. discuss the normal root anatomy and the considerations involved in root scaling and root planing.
2. describe the use of a periodontal probe.
3. relate the use of the #3 cowhorn explorer and #17 explorer to the involvement of bi and trifurcations.
4. list instruments utilized for scaling, root planing and soft tissue curettage.
5. describe the correct technique for root planing and curettage.
6. define root planing and state the indications for its inclusion in a treatment plan.
7. differentiate root planing and scaling.
8. describe how completed root planing can affect tissue healing.
9. define curettage.
10. differentiate a complete periodontal charting, a dental charting and an initial inspection for the presence of periodontal pockets.
11. discuss the uses of the fiber optics as a diagnostic aid.
12. discuss the characteristics of the correct swallow vs. the incorrect swallow.

13. relate the concept of prevention to the rationale for habit therapy.
14. discuss the cavitron, its uses, indications for use and contraindications.
15. contrast the effects of post operative healing following ultrasonic scaling and manual scaling.

Laboratory Objectives:

1. demonstrate on a manikin the correct technique for root planning and soft tissue curettage.
2. correctly chart a periodontal condition in a simulated situation to include a plaque index, a bleeding point index and a periodontal index.
3. demonstrate the use of the fiber optics.
4. demonstrate use of the cavitron on lab partner in clinic.

VIII. Course Outline and Schedule of Instruction

Period	Hours	Didactic	Laboratory
1	3	Instrumentation: Root Planing and Soft Tissue Curettage Technique. Review of root Anatomy.	
2	2		Practice on manikin, use of curets. (Hours: 2)
3	3		Practice: curets

Period	Hours	Didactic	Laboratory
4	2	Periodontical charting: Principles of charting Procedures for charting Radiographic Exam Sequence code for charting	
5	3		Lab: Periodontal charting
6	2		Lab: Periodontal charting
7	3	Quiz #2 Fiber Optics: Uses Radiographs Perio interpretation	
8	2		Lab: Use of curets
9	3		Lab: Use of curets
10	2	Quiz #3 Didactic: Ultrasonic Cavitron uses	
11	3		Practicum: Fiber Optics
12	2		Practical Exam use of curets
13	3	Quiz #4 Myofunctional Therapy Correct Swallow vs. incorrect swallow	
14	2		Lab/Clinic Perio charting
15	3		Lab/Clinic Perio charting

Period	Hours	Didactic	Laboratory
16	2		Lab/Clinic Scaling and root planing (Practical)
17	3		Lab/Clinic Scaling and root planing (Practical)
18	2		Lab/Clinic Scaling and root planing (Practical)
19	3	(Practical) Scaling root planing and curettage	
20	2		Lab/Clinic Scaling root planing and curettage (Practical)
21	3		Lab/Clinic Scaling root planing and curettage (Practical)
22	2		Lab/Clinic Scaling root planing and curettage (Practical)
23	3		Lab/Clinic Scaling root planing and curettage (Practical)
24	2	Final examination	

IX. Teaching Methods:

1. Lectures
2. Demonstrations
3. Practice

X. Media

1. Slides
2. Overhead projector
3. Laboratory manikin
4. Modules as assigned

XI. Evaluation

80% minimum mastery level required in didactic and laboratory

5 - 20 minute quizzes

1 - 2 hour final exam

% Grade on Quiz A	Course Points
93 - 100%	20
85 - 92	19
80 - 84	18
00 - 79	--

% Grade on Quiz B	Course Points
93 - 100%	18
85 - 92	17
80 - 84	16
00 - 79	--

If 80% mastery is not shown on the make-up quix, a verbal exam will be given with a maximum of 3 assigned points if 80% mastery is shown at that time.

% Grade on Final	Points
93 - 100%	20
86 - 92	15
80 - 85	12
00 - 79	--

Make-up opportunity for the final exam will be based on the individual deficiencies demonsteated in the exam and in no case shall a make-up exam be worth more than five points.

XII. Requirements: Laboratory

Four practical exams will be given (25 points each)

1. Use of curets for root planing on manikin.
2. Periodontal charting on clinic patient.
3. Root planing on clinic patient.
4. Root planing and curettage on clinic patient.

Developed by: Mrs. Josephine Rosa
February/1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Title: Periodontics

II. Number: PAXD 045

III. Credit Hours: 3

IV. Clock Hours: 36

V. Type of course: Didactic/Lab-demonstration

VI. Description:

Didactic course intended to provide the dental auxiliary student knowledge about normal periodontium, principles of periodontology and the etiology and classification of periodontal disease. The emergency and most common surgical procedures in the treatment of periodontal disease are also discussed. Special emphasis is given to preventive measures within the scope and responsibility of the dental auxiliary.

VII. Objectives:

A. General

This course will enable the student to utilize and apply knowledge relative to the normal conditions of the periodontium and deviations from the normal, which include etiological aspects, preventive measures and surgical procedures involved in the treatment of periodontal disease.

B. Operational

T 1. Explain locations and functions of periodontal structures

E 1. Name four tissues that basically make up the normal Periodontum.

E 2. Identify three different types of soft tissues that line the oral cavity.

E 3. Locate the three contiguous areas of the gingiva

E 4. State the difference between attached and marginal gingiva

E 5. Relate a gingival sulcus to marginal gingiva

E 6. List-factors that contribute to a firm dentogingival junction

T 2. Describe type, location and function of the periodontal ligaments

E 1. Identify the connective tissue fibers (collagen fibers) that function to hold the marginal gingiva in contact with the tooth.

E 2. Name four groups of collagen fibers.

E 3. Identify the portion of the alveolar process that anchors the fibers of the periodontal ligament.

E 4. Explain four functions of periodontal ligament.

T 3. Describe the alveolar process considering the anatomical relation to the teeth they surround.

E 1. Locate the interproximal bone, intraradicular and radicular bone

E 2. Name two factors affecting thickness and contour of alveolar bone.

T 4. Explain the functions of cementum and its importance to periodontics

T 5. Describe the characteristics of a normal periodontal tissue

E 1. Relate the bone level to a normal periodontal tissue

E 2. Relate the normal thickness of a periodontal ligament

T 6. Describe the etiology of periodontal disease

E 1. Define periodontal disease

E 2. State the two types of etiological factors in periodontal disease

E 3. Define local etiological factors

E 4. Differentiate between a local irritating and a local functional factors, and give three examples of each type.

E 5. Define a systemic factor in periodontal disease and give two examples

T 7. Describe the functions of plaque, materia alba and calculus as initiator of inflamatory periodontal disease.

E 1. Name the different mechanisms by which soft deposits causes gingival and periodontal inflammation.

E 2. Describe the role of calculus in periodontal disease.

T 8. Evaluate oral hygiene effect on the tissues of the oral cavity

E 1. Describe the effect of gingival stimulation

E 2. Name two destructive effects of toothbrush trauma and improper use of dental floss.

T 9. Analyze predisposing etiological factors created by inadequate dental restoration and prostheses and food impaction.

E 1. Name six predisposing etiological factors created by inadequate dental restorations and prostheses.

E 2. State why this conditions are considered predisposing factors

E 3. Name two effects of food impaction on periodontal tissues

T 10. Explain the effect of occlusal forces and para-functional occlusal habits upon the tissues of the periodontium

E 1. Name three para-functional occlusal habits that create excessive forces upon the tissues of the periodontium

E 2. Relate occlusal forces and degenerative changes in the periodontal structures.

T 11. Evaluate mouth breathing as predisposing factor in periodontal disease.

E 1. Define mouth breathing

E 2. Describe the effect of mouth breathing in the gingival tissues.

T 12. Describe the role of the systemic factors in the etiology of periodontal disease.

E 1. Name the mayor categories of systemic factors that play a role in periodontal disease

E 2. Relate the role of systemic and local factors in the etiology of periodontal disease

E 3. State three situations in life when hormonal changes can cause marked effects on gingival tissues

E 4. Explain the role of nutritional factors in the initiation of periodontal disease.

T 13. Explain the diagnostic signs and symptoms of periodontal disease

E 1. Describe the changes that a periodontal condition produces in the gingiva in terms of:

a. color
b. texture
c. consistency
d. size
e. periodontal pocket depth
f. bleeding and exudate

E 2. List the anatomical landmarks which are significant in radiographic interpretation.

E 3. Name four radiographic signs indicative of periodontal disease

E 4. State two reasons why radiographs of diagnostic is essential for evaluating the presence of periodontal disease.

T 14. Explain how systemic factors modify chronic gingivitis

E 1. Name four systemic factors which modify gingival tissues response to irritation

E 2. State changes in gingival tissues of leukemic patients related to color, contour and consistency.

E 3. Relate hormonal changes characteristic of puberty, to inflammatory response to local irritants.

E 4. List preventive measures that should be emphasized in pregnant patients.

T 15. Analyze etiology, characteristics and treatment of Gingival Enlargement

E 1. Differentiate between inflammatory and noninflammatory gingival enlargement.

E 2. State the clinical characteristics of familiar hereditary gingival enlargement.

E 3. Describe the treatment for this condition

T 16. Evaluate gingivitis according to clinical characteristics, etiology pathogenesis, prognosis and treatment.

E 1. Define gingivitis

E 2. Classify gingivitis according to type, extent and distribution of inflammatory reaction

E 3. Describe the clinical characteristics of chronic gingivitis

E 4. State the etiological factor of chronic gingivitis

E 5. State how nutritional deficiencies can affect gingival tissues reaction to local irritating factors.

E 6. Relate control of local etiologic factors to prognosis of chronic gingivitis

E 7. Describe the steps in the treatment of chronic gingivitis

T 17. Explain root planing and gingival curettage procedures

E 1. Define root planing and gingival curettage.

E 2. Explain indications for gingival curettage.

E 3. State contra-indications for gingival curettage.

E 4. Establish treatment sequence for gingival curettage.

T 18. Describe periodontal disease, considering affected areas and characteristics of the condition

E 1. State areas affected by a periodontal disease

E 2. Explain the difference between gingivitis and periodontitis relating to extent of disease.

E 3. Describe changes in alveolar bone as a result of periodontal disease.

E 4. State clinical characteristics of periodontal disease.

T 19. Evaluate gingival and periodontal pocket formation

E 1. Differentiate between gingival and periodontal pocket

E 2. Describe the mechanism of pocket formation

E 3. Name two types of periodontal pockets

T 20. Analyze periodontosis

E 1. Differentiate between periodontitis and periodontosis

E 2. State the clinical characteristics of periodontosis

T 21. Describe different periodontal problems

E 1. Explain gingival recession

E 2. State five predisposing factors for gingival recession

E 3. Define pericoronitis

E 4. Name the etiological factors for pericoronitis

E 5. Define periodontal abscess

E 6. Differentiate between the acute and the chronic stages of a periodontal abscess

T 22. Evaluate principles of periodontal surgery

  - E 1. List the reasons for performing periodontal surgery
  - E 2. Name five methods for surgical elimination of pockets

T 23. Discuss the uses of gingivectomy, osteoplasty, periodontal flap and temporary stabilization.

  - E 1. Define gingivectomy
  - E 2. State the indications and contra-indications of gingivectomy
  - E 3. Define osteoplasty
  - E 4. State the indications for a periodontal flap
  - E 5. State the indications for temporary stabilization

T 24. Demonstrate by means of a film the Gingivectomy and gingivo - plasty surgery technique.

  - E 1. Recognize the importance of a gingivectomy and gingivo plasty in as a gingival treatment.

T 25. Identify what is an acute periodontal problem and its management

  - E 1. Demonstrate the management of the periodontal tissue in an acute periodontal problem

T 26. Explain the procedure for periodontal dressing application and its different types

  - E 1. State five suggestions for care following dressing placement
  - E 2. State the different types of periodontal dressings.
  - E 3. List the objectives for placing a periodontal dressing
  - E 4. Discuss the correct mixing of materials utilized for periodontal pack dressings.

T 27. Describe post-surgery oral physiotherapy

E 1. State five suggestions for care following dressing placement

E 2. Explain follow up precautions.

T 28. Describe tooth sensitivity to thermal changes as a result of periodontal treatment

E 1. Explain the effect of heat in periodontal tissues

E 2. Enumerate the precautions to prevent tooth hypersensitivity

E 3. Name two effects of food impaction on periodontal tissues

VIII. Course Outline and Schedule of Instruction

A. Course Outlines

1. Introduction
    a. Course content and objectives
    b. Methods of evaluation
2. Review of Periodontal Tissues and Nomenclature
    a. Normal Periodontium
    b. The dentogingival juction
3. Etiological Factors
    a. Oral Habits
    b. Soft and Hard deposits
    c. Dental Materials
    d. Occlusal Trauma
    e. Systemic Factors
4. Classification of Periodontal Disease
5. Diagnostic Signs and Symptoms
    a. Radiographic interpretation
6. Gingival Diseases
    a. Gingivitis
    b. Gingival Enlargement

   c. Gingival Recession

7. Root planing and gingival curettage procedures
   a. Healing Process

8. Periodontal Conditions
   a. Periodontitis
   b. Periodontal Pocket
   c. Periodontosis
   d. Pericoronitis

9. Periodontal Surgery
   a. Basic Principles
   b. Gingivectomy and Gingivoplasty
   c. Preparation before surgery
   d. Indications for mucogingival surgery

10. Acute Periodontal Problems
   a. Definition
   b. Management

11. Temporary Stabilization

12. Periodontal Dressings
   a. Types of Periodontal dressings
   b. Objectives of placing a dressing

13. Post-surgery Oral Physiotherapy
   a. Maintenance care

B. Schedule of Instructional Periods

Period	Hours	Topic
1	1	Introduction and course overview, review of periodontal tissues and nomenclature.
2	1	Continuation: Review of Periodontal Tissue and Nomenclature
3	1	Continuation: Review of Periodontal Tissue and Nomenclature

Period	Hours	Topic
4	1	Alveolar bone consideration in periodontics
5	1	Radicular cementum
6	1	Clinical characteristics of periodontal tissues. Etiology of periodontal disease.
7	1	Continuation: Etiology of Periodontal disease
8	1	Continuation: Etiology of Periodontal disease
9	1	Continuation: Etiology of Periodontal disease
10	1	Continuation: Etiology of Periodontal disease
11	1	Continuation: Etiology of Periodontal disease
12	1	Review Session
13	1	Partial Exam
14	1	Classification of periodontal diseases; diagnostic signs and symptoms, radiographic interpretations.
15	1	Gingival diseases
16	1	Continuation: Gingival diseases
17	1	Root planing and curettage procedures
18	1	Periodontal conditions
19	1	Periodontal conditions
20	1	Continuation: Periodontal conditions
21	1	Continuation: Periodontal conditions
22	1	Review
23	1	Partial Exam
24	1	Periodontal surgery
25	1	Continuation: Periodontal surgery
26	1	Continuation: Periodontal surgery
27	1	Acute periodontal problems
28	1	Temporary stabilization

Period	Hours	Topic
29	1	Post surgery oral physiotherapy
30	1	Post surgery oral physiotherapy
31	1	Periodontal pack
32	1	Remedial session
33	1	Review session
34	1	Final Exam

IX. Teaching Methods

Lectures, demonstrations, group discussion

X. Media

Film, slides, overhead projections

XI. Evaluation

The student will perform to a 80% mastery level. Two partial examination, 100 points each. One final examination, 100 points.

XII. Pre-requisite course

Preventive Dentistry II

XIII. Textbook

E.M. Wilkins, Clinical Practice of the Dental Hygienist, 4th ed. Lea and Febiger, 1976, Philadelphia

XIV. References

S. Stone and P.J. Kalis; Periodontics (module 6 of Dental Auxiliary Practice Biological Basis and Clinical Application); 1rst edition; Williams and Wilkins Co., 1975, Baltimore

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Revised by Dr. Orlando Rojas

March, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title of Course: Biochemistry and Nutrition

II. Number: PAND 033

III. Credit Hours: 3

IV. Clock Hours: 36

V. Methodology: Lectures, discussion sessions, limited laboratory, written exercises

VI. Description:

This course provides the student with basic information regarding the biochemical aspects of nutrients, their metabolic roles and interrelationship. The effects of lack, or excess on body tissues and nutrition requirements and distribution in foods is discussed. Techniques for the recording and evaluation of nutritional data and counseling of dental patients are amply discussed. The interrelationships of nutrients and dental health is thoroughly explained.

VII. General Purposes:

The basic purpose of the course is to assist the student in developing, understanding, and applying basic concepts of human nutrition.

VIII. Objectives:

A. Terminal

Upon completion of the course, students will achieve an appropriate understanding of both biochemical and nutritional aspects of nutrients and foods and utilize this knowledge in the interpretation of dietary histories and dietary counseling of dental patients.

B. Operational:

Throughout the various sections and upon completion of the course, students will:

1. Describe the process by which food is prepared for absorption.
2. Explain the chemical processes and name enzymes involved in digestion.
3. Given a specific nutrient or group of nutrients, the student can recall the major characteristics, functions, food sources and human requirements of these nutrients.
4. Describe 3 specific functions of these nutrients in oral tissue health.
5. Identify the structural formula of an amino acid.
6. Explain the basic concepts in protein: amino acids, peptide linkage, essential amino acid biological value of protein.
7. Recall the classification of amino acids according to structure and chemical properties.
8. Define metabolism, anabolism, catabolism, basal metabolism.
9. Identify the structural formula of carbohydrates.
10. Name type, food source and products of the hydrolysis of carbohydrates utilized by man.
11. Identify the glucosidic linkage.
12. Describe the general processes involved in the metabolism of carbohydrates: explain the differences of aerobic and anaerobic glycolisis and the amount of energy produced.
13. Explain how the process of glycolisis is related to caries formation.

14. Name the cariogenic foods and nutrients.

15. Name the cariostatic foods and nutrients.

16. Explain basic concepts of lipids: define fatty acid, saturated, polyinsaturated fatty acid and essential fatty acid.

17. Indicate the nutritional significance of fats and identify the pertinent and controversial issues about fat.

18. Name the classification of vitamins.

19. Analyze the specific roles of vitamins A, C. D and folic acid in tooth formation and maintenance.

20. List the macrominerals and the trace elements.

21. Explain thoroughly the nutritional roles of calcium, phosphorus, iron and fluor in oral health.

22. Name the four food groups and basic diet of the puertorican population.

23. List four foods included in each of the groups.

24. Record three nutrients contributed by each food group.

25. Compare the Puerto Rico Food Guide and the U.S. Food Guide.

26. Explain in his own words the meaning of a food guide.

27. Estimate the size of food portions commonly used--milk, cheese, ice cream, meat, eggs, beans, green and yellow vegetables, fruits, starchy vegetables, fats, cereals and sugar.

28. Classify foods according to food groups to which they belong.

29. Collect and arrange information in a 5-day diary food intake.

30. Assess dietary information (qualitative nutritional evaluation) using the four food groups.

Upon completion of a self-instructional package, the student should be able to:

31. Recognize cariogenic foods.
32. Classify type of succrose ingestion.
33. Evaluate frequency of succrose intakes.
34. Calculate number and types of succrose intakes.
35. Compute demineralization time of succrose intake: average per day.
36. Formulate a dietary plan (indirect approach) to help patient in the modification of his diet both in terms of food groups and succrose control.

IX. Evaluation Information

Description of expectations:

--For the tests, 75% minimum score.

--Grading of a written paper - "Diet Evaluation of a Dental Patient"

--Class attendance

--Participation in class discussions

--Test and written paper weighted equally

--Conduct of classes and testing procedures will emphasize memory. translation, interpretation and application of knowledge and skills.

Testing procedures

--Two partial and one final examinations

--Written paper

X. Course Outline and Schedule of Instruction

Period	Hours	Topic
1	1 1/2	Introduction and Course Overview Chemical Processes of Digestion and Absorption of Food. The Digestion Enzymes and Endocrine Glands.

Period	Hours	Topic
2	1 1/2	Chemistry of Proteins
3	1 1/2	Chemistry of Proteins Nutritional Value of Proteins
4	1 1/2	Chemistry of Fats and Other Lipids
5	1 1/2	Chemistry of Carbohydrates
6	1 1/2	Role of Carbohydrates in Human Nutrition
7	1 1/2	Interrelationships of C H O, Protein and Fat Metabolism
8	1 1/2	Energy Metabolism Energy Requirements and Energy Value of Foods
9	1 1/2	Partial Examination
10	1 1/2	Fat Soluble Vitamins
11	1 1/2	Vitamin C - Complex: B_1 Riboflavin, Niacin, B_{12} Folic Acid B_6
12	1 1/2	Vitamin B Complex: Biotin, Pantothenic Acid, Vitamin C
13	1 1/2	Introduction to the mineral elements: Calcium, Phosphorus, Magnesium, Iron, Copper
14	1 1/2	Fluor in Dental Health
15	1 1/2	Iodine and Other Trace Elements
16	1 1/2	Partial Examination
17	1 1/2	The Normal Diet. Food Guide for P.R. and Food Guide of U.S.
18	1 1/2	Laboratory Exercises: Food Portions, Measure and Weights, Dietary Record
19	1 1/2	Food Needs of Infants, Children and Adolescents
20	1 1/2	Food Needs in Pregnancy and Lactation Adequate Diet for the Aged
21	1 1/2	Cariogenicity of Different Foodstuffs
22	1 1/2	Diary Form of Recording Food Intake
23	1 1/2	Diary Form of Recording Sweet Intake
24	1 1/2	Evaluation of Dietary Information
25	1 1/2	Final Examination

XI. Texts and References

Required: Bogert, Briggs, and Callorony. *Nutrition and Physical Fitness* 9th Ed. 1973

Díaz-Collazo, H. Self-Instructional Package - *Evaluation of Sucrose Intake of a Dental Patient*. Nutrition Program, Medical Sciences Campus.

Sintes, J. *Prevalencia de Caries Dentales en Niños de 7mo. Grado.* Thesis, Nutrition Program, Medical Sciences Campus, 1974.

Díaz Collago, H. *Potencial Cariogénico de los Alimentos.* Bulletin ADA, Puerto Rico Chapter, 1976.

Optional: Taylor C.; Pye, D.F. *Foundations of Nutrition.* 6th. ed.

Harper H.A. *Review of Physiological Chemistry* 13th ed. 1972.

Sockheim, G.S., Schultz, R. *Chemistry for the Health Sciences.* 1970.

XII. Special Assignment:

Five-day dietary record and evaluation of sweet intake. Analysis and evaluation of nutritional information; recommendations and conclusions. Presentation of written paper and discussion with the instructor by appointment.

XIII. Resources:

Staff: Assistant Professor: Mrs. Hilda Díaz-Collago
1 self-instructional package
Food models
Textbook and References
Special Mimeographed materials and handouts
Standard measurement and wrighing equipment
"Nutrition Today" teaching aids (slides, charts, transparencies)

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Pharmacology

II. Course Number: PAXD 041

III. Credit Hours: 2

IV. Clock Hours: 24

V. Methodology: Lectures
Demonstrations
Group discussions
Guest interview

VI. Course Description.

This course will introduce students to terminology, pharmacological principles of drug action and the therapeutic and toxicologic effects of clinically important drugs in medical and dental practice.

VII. General Objectives:

At the completion of the course the dental auxiliary trainee will evaluate the basic concepts in classification, methods of administration, uses, effects, and damages of drugs commonly used in dentistry.

VIII. Reference:

A Textbook for Dental Assistants
p. 200-201

T1. Explain classic concepts in the nomenclature and sources of therapeutic agents.

E 1. Define drug

E 2. State four sources of drugs

E 3. Relate pharmacodynamics to therapeutics

A Textbook for Dental Assistants p. 200-201	T 2. Analyze drugs classification considering type of action E 1. Define the organotropic concept E 2. Name two types of organotropic drugs E 3. Differentiate between stimulant and depresant effect E 4. Discuss the precautions to be taken by the patient who is receiving depressant drugs. E 5. Describe the effect of anti-infective drugs.
A Textbook for Dental Assistants p.200 - 201	T 3. Explain the routes of administration of drugs E 1. List four routes of drug administration E 2. Compare advantages and disadvantages of oral administration and intravenous administration of drugs.
Clinical Pharmacology p. 14-16	T 4. Analyze the process of drug absorption E 1. Name three factors affecting rate of drug absorption. E 2. Relate parenteral drug administration and rate of drug absorptio

A Textbook for Dental Assistant p. 201-203	T 5. Explain the factors affecting drug dosage.
	E 1. Name four factors affecting drug dosage
	E 2. List two methods for dosage calculation.
Clinical Pharmacology p. 24-26 A Textbook for Dental Assistants p. 203	T 6. Explain drug elimination process
	E 1. List sites of drug elimination
Medical Pharmacology p. 208-209 212-213	T 7. Evaluate the use of sedatives and hypnotics in dental treatment
	E 1. Define sedation and hypnosis
A Textbook for Dental Assistants	E 2. State the pharmacological effects of barbiturates in dental practice
	E 3. State the reason why barbiturates should not be prescribed for patients in pain unless an analgesic is also prescribed.
	E 4. Interpret four precautions and contraindications related to the use of barbiturates.
Medical Pharmacology p. 223-229	T 8. Explain the special considerations that should always be kept in mind relative to the use of sedative hypnotic drugs.

E 1. Discuss the importance of patient education related to use of alcohol while using barbiturates.

E 2. Discuss the importance of taking a recent detailed medical history before insituting drug therapy.

E 3. State why a nursing mother must be careful about the drugs she takes.

Clinical Pharmacology p.101-103

T 9. Analyze the use of narcotics in dental treatment.

E 1. State classification of narcotics

E 2. Describe therapeutic and adverse effects of narcotics in the respiratory center

E 3. Describe the side effects of using narcotics

E 4. State precautions that should be taken when releasing pre-medicated ambulatory patients after root planning and gingival curettage procedures .

Medical Pharmacology p. 151-161

T10. Explain pharmacologic actions of histamines

E 1. Define histamine

	E 2. State effect of histamine on arterioles, venules, and capillaries.
Clinical Pharmacology p 155-156	E 3. Relate vasodilation and increased capillary permeability to cardiovascular shock.
	E 4. Name one skin reaction of histamine when introduced in superficial layers of skin
Clinical Pharmacology p. 156-157	T11. Evaluate clinical manifestations of allergic reactions
	E 1. List the clinical manifestations of allergic reaction
Medical Pharmacology p.158-159	E 2. List drugs used in the treatment of allergic reactions in dental practice.
Clinical Pharmacology p. 156-157	T12. Describe signs, symptoms and treatment for anaphylactic shock reaction
	E 1. List symptoms of anaphylactic shock reaction
	E 2. Name in order the signs of anaphylactic shock reactions
	E 3. Name the drugs used for treatment of anaphylactic shock reaction.
Clinical Pharmacology p. 157-161	T 13. Describe pharmacological actions and therapeutic uses of antihistamines

Medical Pharmacology p. 162-167

E 1. Explain the use of antihistamines in preventing histamine induced edema.

E 2. State anti-histamines effect as local anesthetics

E 3. Name five side effects of anti-histamines

E 4. List therapeutic uses of anti-histamines in medical emergencies

A Textbook for Dental Assistants p. 179-181

T14. Discuss the effects on the human body by the hormones produced by endocrine glands.

E 1. Define hormone

E 2. State possible drug reactions of a patient treated by adreno-cortical steroid.

E 3. State clinical use of steroids.

E 4. State possible drug reactions of a patient treated by adreno-cortical steroid when he is put under stress

E 5. State the causes of insulin shock and diabetic coma

E 6. Describe procedures for treatment of a patient with insulin shock and diabetic coma.

Clinical Pharmacology p. 193-194

T15. Explain usefulness of anticoagulants and precautions that should be observed for dental treatment.

E 1. State benefit of anticoagulant therapy.

E 2. Explain results of large doses of anticoagulants in dental treatment.

E 3. State two examples of anti-coagulant drugs.

E 4. State a dental precaution to be taken with a patient receiving anticoagulant therapy before an oral prophylaxis is performed.

Clinical Pharmacology p. 180-187

T16. Describe uses and effects of anti-hypertensives and how they can affect dental treatment

E 1. Name the types of cardiovascular drugs

E 2. State three modes of action of hypertensives

Clinical Pharmacology p.180-187

T17. Explain use and functions of diuretics and antianginal agents

E 1. Describe how diuretics reduce extracellular fluid

E 2. Describe symptoms of angina

E 3. State the emergency treatment to be performed in angina pectoris

Medical Pharmacology p. 543-547

T18. Analyze components of a prescription

E 1. Define the concept "therapeutic dosage" of a drug

E 2. List the components of a prescription

E 3. Recognize the following common abbreviations for prescription writing: q. i.d., a.c., p.c., stat., 3, ss, tab., p.o., disp.

Clinical Pharmacology p. 195-207

T19. Describe the process of infection

E 1. Define infection

E 2. Name three factors that determine the likelihood of a microorganism causing an infection.

E 3. Name two types of microorganism that cause most dental infections

Clinical Pharmacology p. 195-207

T20. Explain prophylactic indications of antibiotics

E 1. Explain the use of antibiotics when patients suffer rheumatic fever and/or hear disease before and after they undergo oral hygiene treatment

E 2. Explain the importance of antibiotic sensitivity tests

E 3. Name three of the most common antibiotics used in dental practice.

Clinical Pharmacology in Dental Practice p. 136-149

T21. Compare the different types of anesthetics

E 1. Review the desirable qualities of a local anesthetic

E 2. Relate the use of vasoconstrictors in patients with cardiovascular disease

E 3. Discuss the use of antihistamines as local anesthetic

E 4. Synthesize the different agents for infection

E 5. Discuss the absorption and metabolism of local anesthetics

E 6. Describe the mechanism of action of local anesthetics

E 7. List content of anesthetic carpule

Clinical Pharmacology in Dental Practice p. 43-53

T22. Evaluate the use of general anesthesic

E 1. List the methods for administering anesthetic agents

E 2. Recall the different theories in the mechanisms of action of general anesthetic

E 3. Differentiate the different stages and planes of anesthesia

E 4. Describe the different types of inhalation and intravenous anesthetics.

Anesthesia in Dentistry
p. 13-14, 21-25, 27

T25. Analyze clinical procedures for the control of pain and fear in the dental patient.

E 1. State goal of physical evaluation.

E 2. Describe common anxieties of dental patients.

Reference

Clinical Pharmacology
P. 247-255

T24. Explain the importance of early detection of medial emergencies in dental hygiene practice.

E 1. State the ultimate goal of emergency treatment in dental office.

E 2. Name three emergency situations in dental practice.

E 3. State the role of dental auxiliary in the administration of drugs during emergency situations.

E 4. State the treatment of syncope

Module p.27

T23. Explain effect and use of hemostatic drugs.

E 1. Define hemostasis.

E 2. State effect of hemostatics in blood coagulation.

E 3. Name three examples of hemostatic drugs.

Reference

E 3. State procedures for reducing anxiety in dental patients.

E 4. List and explain seven purposes of premedication.

T26. Explain the uses of the most common over the counter drugs.

E 1. List the most common analgesic drugs.

E 2. Describe the uses of Valium and Librium.

E 3. Know the most common antibiotics prescribed by dentists.

T27. Explain the treatment of choice for patients suffering herpes labialis, moniliasis and labial ulcers.

E 1. State the drug of choice for the treatment of Herpes Labialis.

E 2. List the treatment for a patient presenting a case of moniliasis.

E 3. Explain the use of lubricating gel in cases of labial ulcers.

IX. Course Outline

1. Introduction to Pharmacology
    a. Nomenclature
        1) drug
        2) divisions

b. General Principles
   1) classification
   2) routes of administration
   3) absorption
   4) dosage
   5) elimination
c. Prescription Writing

2. Drug Groups and General Considerations
   a. Sedatives
   b. Hypnotics
   c. Narcotic Analgesics
   d. Histamines
   e. Hormones
   f. Antihypertensives
   g. Antianginal
   h. Anticoagulants
   i. Antibiotics
   j. Hemostatic drugs
   k. Local anesthetics
   l. General anesthetics
   m. Over the counter drugs

3. Medical Emergencies

Schedule of Instructional Periods

Period	Hours	Topics
1	2	Introduction to Pharmacology, Nomenclature and Sources of Therapeutic Agents, Drug classification.
2	2	Drug administration absorption, dosage, elimination, sedatives and hypnosis.
3	2	Narcotic, analgesics, histamines.
4	2	Allergic reactions, anaphylastic shak. anti-histamines.
5	2	Hormones, anticoagulants.
6	2	Antihypertensives, diuretics and anti-angenal agents.
7	2	Prescription writing, process of infection.
8	2	Antibiotics,
9	2	General and local anesthetics.
10	2	Hemostatic drugs and medical emergencies.
11	2	Pain control, over the counter drugs.
12	2	Final examination

XI. Media

1. Illustrations and Visual Aids
2. Reading Material
3. Videq-casettes

XII. Evaluation

Four quizzes (100 points); class participation and reports (100 points) and final examination (200 points).

XIII. Requisite Course

Completion of Level I.

XIV. References

1. Jorgensen, N.B. Hayden, J., Premedication, Local and General Anesthesia, Lea & Febiger, 1965.

2. Holroyd, S.V., Clinical Pharmacology in Dental Practice, The C.V. Mosby Co., 1974.

3. Dunn, M.J., Booth, D.F., Clancy, M., Pharmacology/Pain Control Sterile Technique/Oral Surgery, The Williams & Wilkins Co., 1975.

4. Goth A., Medical Pharmacology, The C.V. Mosby Co., Second Edition, 1964.

5. Park U.R., Ashman, J.R., Shelly, G.J., A Textbook for Dental Assistants, W.B. Saunders Co. Second Edition.

Library Assignments for class discussion.

Dental Considerations for Treatment of the Alcohol Consuming Patient, Dennis W. Symothis, DMD, JADA, Volume 95, September 1977.

Prevention of Bacterial endocarditis, A Committee Report of the American Heart Association., JADA, Volume 95, September 1977.

Developed by Dr. Víctor E. Fernández
February, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Number: PAXD 035
II. Course Title: Clinic II
III. Credit Hours: 13
IV. Clock Hours: 312
V. Methodology: Clinic
VI. Course Description:

This clinical course provides the opportunity for students to develop those skills necessary for the treatment of patients with heavy calcified deposits and moderate to severe gingivitis. Students learn how to render preliminary treatment ot patients with periodontitis and how to determine if patients require further periodontal treatment. Students also practice using ultrasonic scaling devices and charting oral conditions. In addition, students will also rotate through the Veteran's Administration Hospital dental clinic where they gain experience working with hospitalized patients. During this experience students will have the opportunity to work with patients with physical needs, spinal cord injury including bedridden and head and neck CA patients who are treated with radiotherapy and patients with partial function of their upper extremities.

VII. Objectives:

A. General

Clinical sessions will enable the student to:

1. develop those skills that are necessary for the treatment of more difficult patients including patients with periodontal involvement, hospitalized patients and patients with special needs.

2. provide educational experiences that will enable students to become familiar with hospital procedures, interpreting medical records, and the management of patients requiring special preventive care and treatment.

B. Operational

Students in providing dental care will treat a minimal number of patients with the following proficiency levels:

1. demonstrate 80% proficiency in determining factors that influence individualized instruction including determination of oral hygiene status, periodontal health, basis for patient motivation and deposit retention factors.
2. chart hard and soft tissue recording normal and abnormal conditions, restorations, lesions and periodontal involvement, using radiographs and the periodontal probe with 80% proficiency.
3. evaluate with 90% proficiency a prophylaxis classification of Class I through Class V patients in accordance with given classification standards.
4. plan comprehensive treatment for 1 patient, with 90% proficiency including a preventive treatment plan and the following:
    a. systemic factors influencing treatment
    b. consultations with other departments if necessary.
5. perform an oral prophylaxis on 6 patients classified as Class IV or Class V with an 80% minimal proficiency which must be completed in 3 - 4 appointments unless otherwise specified by clinical instructor.
6. perform periodontal therapy on 3 patients for a total of 8 quadrants with a minimal proficiency of 85%.

7. evaluate with 80% proficiency the periodontal condition of patients who have received treatment, and determine those patients who need further periodontal treatment.
8. formulate revised oral health programs for patients seen on recall in light of the oral health status exhibited by these patients, 90% proficiency.
9. demonstrate the use of ultrasonic scaling devices in periodontal treatment with a 95% proficiency.
10. perform 2 dietary surveys by analyzing sucrose containing foods with a proficiency of 100% to include the following:
    a. fermentable CHO
        1) types
        2) frequency of use
        3) time of use
        4) consistency
        5) quantity
    b. acid production
    c. alternatives to sweets
11. instruct periodontal patients in post operative care, 100% proficiency.
12. read and interpret medical records by pointing out those conditions that will affect dental and preventive procedures.
13. use and operate the mini-op dental unit.
14. plan preventive oral procedures for the patient in need of radio-therapy of the head and neck region.

VIII. Course Outline and Schedule of Instruction (See Clinic I outline)

IX. Teaching Methods: Clinical work: Dental School Clinic
Hospital experiences: Ambulatory and bedridden patients

X. Media: Treating patients under supervision of dental auxiliary program faculty.

Educational seminars of VA Hospital:

- I Reading and interpretation of medical records-1/2 hr.
- II Using and operating the mini-op dental unit -1/2 hr.
- III Preventive oral procedures for the patient in need of radio-therapy of the head and neck regions - 2 hrs.
- IV Management of the patient with physical limitations- 1 hr.

XI. Evaluation: See attached evaluation form.

Patient requirements: minimum of 6 patients Class IV or Class V
3 patients (periodontal therapy) with
minimum of 8 quadrants.

XII. Prerequisite course: summer and first trimester 02 year pre-clinical courses.

XIII. Textbook:

Wilkins, Esther, "Clinical Practice of the Dental Hygienist
Lea and Febiger, Phila. 4th ed. 1976

Revised by J. Rosa, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Seminar IV
II. Course Number: PAXD 036
III. Credit Hours: 1
IV. Clock Hours: 12
V. Methodology: discussion
VI. Description:

Time will be devoted to discussion of any problem which may arise during the clinical experience in the assigned clinics. Emphasis will be placed on the integration of the didactic periodontal experiences into the clinical ones and on the sharing of clinical experiences in order to enhance the clinical exposure of each student.

VII. Objectives

A. General

Acquire further experience in problem-solving situations related to their clinical experiences.

B. Operational

During these seminar sessions the student will:

1. demonstrate ability to problem-solve by verbalizing possible solutions to problems presented in class.
2. relate to classmates, a clinical experience that may have posed an unusual situation.
3. apply didactic concepts to clinical cases.

VIII. Evaluation

Pass or fail - based on attendance and participation.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Number: PAXD 037
II. Title: Clinic III
III. Credit Hours: 16
IV. Clock Hours: 396
V. Methodology: Clinic
VI. Course Description:

This clinical course further expands the student's experiences in working with patients with heavy calcified deposits and patients with periodontal involvement. Students continue to rotate through the Veteran's Administration Hospital dental clinic and through the wards attending patients. Emphasis will be placed on the development of professional judgment. During this experience students will have the opportunity to work with patients with special needs, spinal cord injury including bedridden and head and neck CA patients who are treated with radiotherapy and patients with partial function of their upper extremities.

VII. Objectives

A. General

Clinical sessions will enable the student to:

1. continue developing those skills that are necessary for the treatment of more difficult patients, hospitalized patients and patients with special needs.

B. Operational

Students in providing dental care will treat a minimal number of patients with the following proficiency levels:

1. demonstrate 90% proficiency in determining factors that influence individualized instruction including determination of oral hygiene status, periodontal health, basis for patient motivation and deposit retention factors.

2. chart hard and soft tissue recording normal and abnormal conditions, restorations, lesions and periodontal involvement, using radiographs and the periodontal probe on 8 patients with 90% proficiency.
3. evaluate with 90% proficiency a prophylaxis classification of Class I through V patients, in accordance with given classification standards.
4. plan comprehensive treatment for 1 patient with 95% proficiency including a preventive treatment plan and the following:
    a. systemic factors influencing treatment
    b. consultation with other departments if necessary
5. perform an oral prophylaxis on 6 patients classified as Class IV or Class V with an 85% minimal proficiency which must be completed in 3 - 4 appointments unless otherwise specified by clinical instructor.
6. perform periodontal therapy on 4 patients for a total of 10 quadrants with a minimal proficiency of 90%.
7. evaluate with 90% proficiency the periodontal conditions of patients who have received treatment, and determine those patients who need further periodontal treatment.
8. formulate revised oral health programs for patients seen on recall in light of the oral health status exhibited by these patients, 100% proficiency.
9. demonstrate the use of ultrasonic scaling devices in periodontal treatment with a 100% proficiency.
10. perform 3 dietary surveys by analyzing sucrose containing foods with a proficiency level of 100% to include the following:
    a. fermentable CHO
        1) types
        2) frequency of use
        3) time of use

4) consistency

5) quantity

b. acid production

c. alternatives to sweets

11. instruct periodontal patients in post operative care, 100% proficiency.

12. read and interpret medical records by pointing out those conditions that will affect dental and preventive procedures.

13. use and operate the mini-op. dental unit.

14. plan preventive oral procedures for the patient in need of radiotherapy of the head and neck region.

VIII. Course Outline and Schedule of Instruction (See Clinic II outline)

IX. Teaching Methods: Clinical work

X. Media: Treating patients under supervision of dental auxiliary program faculty.

XI. Evaluation: same as Clinic I and II

Patients requirements: minimum of 6 patients Class IV or Class V
4 patients (periodontal therapy with a
minimum of 10 quadrants.

XII. Prerequisite Course: All courses summer trimester and first trimester Level I.

XIII. Textbook:

Wilkins, Esther, "Clinical Practice of the Dental Hygienist",
Lea and Febiger, Phila., 4th ed. 1976

Revised by J. Rosa, 1979

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Title: Seminar V
II. Course Number: PAXD 049
III. Credit Hours: 1
IV. Clock Hours: 12
V. Methodology: discussion
VI. Description:

Time will be devoted to the discussion and sharing of situations arising during the clinic. Emphasis will be placed in the application of the didactic experiences to the clinical ones and in developing skills in the interpretation and critique of dental literature.

VII. Objectives

A. General

1. Acquire further experience in problem solving situations related to their clinical experiences.
2. Develop skills in the evaluation of a dental research article.

B. Operational

T1 Evaluate an abstract from a scientific research document.

E1 State criteria used for evaluating the document.
E2 Point out major findings of the researcher.
E3 Write a statement defining the problem presented.
E4 State the hypothesis presented.
E5 List the methods or procedures used by the researcher.
E6 Describe the results of the study presented.
E7 Explain the statistics concepts involved in analyzing the data.
E8. Discuss the results.

E9 Relate results and hypothesis.

E10 Describe limitations of the study and implications for further research.

E11 State facts you can use to replicate the study.

E12 Identify the research bibliography.

VIII. Evaluation

Pass or fail - based on attendance and participation.

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COLEGIO DE PROFESIONES RELACIONADAS CON LA SALUD
DEPARTAMENTO DE AUXILIARES DENTALES

I. Course Title: Remediation Seminar for 02 year students

II. Course Number: None

III. Credit Hours:

IV. Clock Hours: 24

V. Methodology: Lecture, conference and class reports

VI. Course Description:

This remediation course will compliment contents in Microbiology Dental Anatomy, Anatomy and Physiology, Pathology, and Pharmacology which was not covered initially.

VII. Objectives:

1. Explain the different laboratory techniques and procedures utilized to identify bacteria.
2. Analyze the different sterilization procedures and techniques in relation to the microorganisms affected.
3. Appreciate the importance of sound sterilization techniques in a dental practice.
4. Distinguish the different components of normal blood.
5. Discuss the host-parasite relationship.
6. Explain the growth requirements and bacterial metabolism as related to bacterial physiology.
7. Discuss the pathogens transmitted from the soil.
8. Describe the pathogens and diseases transmitted in blood.
9. Compare the root anatomy of maxillary and mandibular teeth in relation to number of roots, form, length, and contour.

10. Relate the basic components of the masticatory system to mandibular movement and occlusion.
11. Evaluate anatomy functions and disorders of the voluntary system.
12. Describe the involuntary system.
13. Explain the importance and function of the endocrine system.
14. Discuss the main glands of the human body and its functions.
15. Explain the general anatomy and function of the lymphatic system.
16. Describe the most common benign and malignant neoplasias.
17. Discuss the effects of nutritional deficiencies of basic foods and vitamins.
18. Compare the different types of local anesthetics.
19. Evaluate the use of general anesthetics.

VIII. Course Outline

A. Laboratory techniques for the identification of bacteria.
  1. stains and classification by type of staining.
  2. microscopic techniques and equipment.
  3. types of culture.

B. Effects of physical and chemical agents on microorganisms.
  1. Inhibition
    a. low temperatures
    b. dessication
    c. combination of dessication and freezing
    d. high osmotic pressures
    e. bacteriostatic chemicals and drugs
  2. Removal
    a. passing fluids containing bacteria through very fine filters
    b. high speed centrifugation

3. Destruction
    a. fire
    b. heat
    c. chemicals
    d. radiation
    e. mechanical

C. Components of Normal Blood
  1. Plasma
  2. Red blood cells
  3. White blood cells
  4. Platelets
  5. Blood clotting mechanisms
  6. Blood types

D. Infection: Host Parasite Relationship
  1. Ecology
  2. Symbiosis
  3. Parasite
  4. Host
  5. Infection
    a. dose of infecting organisms
    b. virulence
  6. Toxins
    a. endotoxins
    b. exotoxins

E. Physiology of bacteria
  1. Growth requirement
  2. Bacterial metabolism
    a. catabolism
    b. anabolism

F. Pathogens from the soil
   1. Clostridium tetani
   2. Anthrax
   3. Histoplasmosis
   4. Candida albicans

G. Pathogens transmitted in blood
   1. Serum hepatitis
   2. Malaria
   3. Typhus

H. Principles of Occlusion
   1. Definitions
      a. occlusion
      b. mal-occlusion
      c. centric occlusion (centric relation)
      d. "overbite"
      e. "overjet"
   2. Basic components of the masticatory system
      a. maxillae
      b. mandible
      c. teeth
      d. muscles - masseter, temporal, external and internal pterygoid
      e. T.M.J.
   3. Mandibular movements
      a. depression }
      b. elevation } bilaterally symetrical
      c. protrusion }
      d. retraction }
      e. lateral movements - right, left } bilaterally, asymetric

4. Functional relations brought about by mandibular movements
    a. Centric occlusal relation
    b. Protrussive occlusal relation
    c. Retrussive occlusal relation
    d. Right lateral occlusal relation
    e. Left lateral occlusal relation
5. Rationale for tooth alignment
    a. Mandibular movement with teeth in contact
    b. Avoid clashing of points and edges during teeth contact
    c. During closing and opening movements, cheeks, lips, and tongue are less likely to be clipped.
    d. Protection of gingival papillae and soft tissue
    e. Dental arch is stabilized

I. Tooth classification and function
    1. Incisor
    2. Canines
    3. Premolars
    4. Molars

J. Compensating curves of the dental arches
    1. Curve of spee
    2. Monson's curve

K. Compensating curvatures of individual tooth and masticatory system stability
    1. Axial curvature of individual tooth and line of force

L. Occlusal contact and intercusp relations
    1. Buccal
    2. Lingual aspect

M. Nervous System
    1. Voluntary system
        a. types of neurons
        b. physiology of nervous tissue
        c. anatomy and functions of the spinal cord
        d. disorders
    2. Involuntary system
        a. autonomic nervous system
        b. sympathetic syndrome

N. Endocrine System
    1. Function and importance
    2. Chemical nature of hormones
    3. Main glands and physiology

O. Lymphatic System
    1. Anatomy and physiology
    2. Function

P. Neoplasia
    1. Definition
    2. Classification
        a. benign
            1) papilloma
            2) adenoma
            3) fibroma
            4) hemangioma
            5). nevus
            6) composite odontoma
        b. malignant

            - 1) squamous cell carcinoma
            - 2) basal cell carcinoma
            - 3) adenocarcinoma
            - 4) leukemia

- Q. Nutritional Disturbances
    - 1. Deficiencies of basic foods
        - a. carbohydrates
            - 1) diabetes
                - a) insulin shock
                - b) diabetic comma
                - c) oral manifestations
        - b. fats
        - c. proteins
    - 2. Deficiencies of vitamins
        - a. Vitamin A
        - b. Vitamin B-complex
        - c. Vitamin C
        - d. Vitamin D
        - e. Vitamin E
        - f. Vitamin K
- R. General and Local Anesthetics

IX. Schedule of Instructional Periods

Period	Hours	Topic	Instructor
1 & 2	2	Microbiology:	
		Lab Techniques for the identification of bacteria.	Dr. V. Fernández
		Effects of physical and chemical agents on microorganisms.	"
3	1	Components of normal blood	"

Period	Hours	Topic	Instructor
4	1	Infection: Host Parasite Relationship	Dr. V. Fernández
5	1	Physiology of Bacteria	"
6 & 7	2	Pathogens from the Soil Pathogens Transmitted in Blood	" "
		Dental Anatomy:	
8 & 9	2	Principles of Occlusion	Dr. A. Aja
10	1	Tooth Classification and Physiology Compensating Curves of Dental Arches	" "
11	1	Occlusal Contact and Intercusp Relations Compensating Curvature of Individual Teeth	"
		Anatomy and Physiology:	
12 & 13	2	Nervous System	Dr. J. O. Rojas
14 & 15	2	Endocrine System	"
16 & 17	2	Lymphatic System	"
		Pathology and Pharmacology:	
18 & 19	2	Neoplasia	Dr. V. Fernández
20 & 21	2	Nutritional Disturbances	"
22 & 23	2	General and Local Anesthetic	"
24	1	Final Examination	"

X. Evaluation

Students will have weekly quizzes and final examination. Laboratory research projects will be scheduled in the microbiology section.

Developed by Dr. Victor Fernández, Dr. Angel Aja, and Dr. José O. Rojas
February, 1979